

# AMERICAN ARTISAN and Hardware Record

Vol. 80. No. 7. 620 SOUTH MICHIGAN AVENUE, CHICAGO, AUGUST 14, 1920.

\$2.00 Per Year.

## "PLECKER'S"

CORRUGATED EXPANDING CONDUCTOR PIPE  
AND  
GALVANIZED EAVES TROUGHS

*Your customers will not need new conductor pipe and eaves troughs for a long time after you sell them some "PLECKER'S" rust and corrosion resisting conductor pipe and galvanized eaves troughs **BUT**—their friends will and you will get **their** business.*

They also will become **SATISFIED** customers and when **their** friends need conductor pipe and eaves troughs they will be sent to you.



### *Order a Supply Now for Your Next Job*

"PLECKER'S" CONDUCTOR PIPE AND EAVES TROUGH is made of *Keystone Copper Bearing Steel*. It resists rust and corrosion. It withstands the longest and most severe service. That's why it satisfies customers. They want conductor pipe and eaves troughs that last long.

Here is another point of interest. It costs no more than ordinary makes.

WRITE TODAY FOR OUR CATALOG LISTING TIN PLATE,  
TINNERS' TOOLS AND SUPPLIES OF ALL KINDS

CLARK-SMITH HARDWARE COMPANY  
PEORIA, ILLINOIS

## "QUICK COMFORT" OIL HEATERS *are ready for shipment now*

If you have not placed your order for fall delivery do so at once

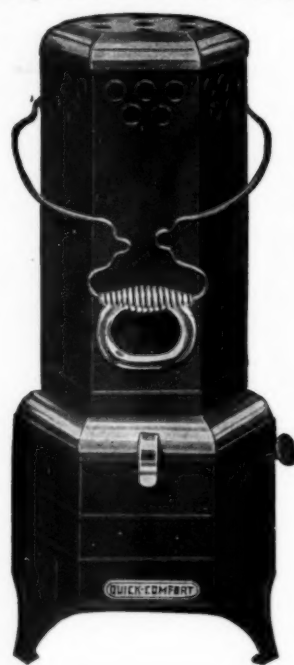


### "QUICK COMFORT" OIL HEATERS

have reinforced fount bottoms, use extra heavy wicks which cannot stick and the two piece smokeless device insures an extremely hot flame.

*For more particulars write to*

**QUICK MEAL STOVE CO.**  
DIVISION of AMERICAN STOVE CO.  
825 Chouteau Ave. ST. LOUIS



## MAHONING HEATING SYSTEMS

### "IT'S A PIPELESS AGE"

One of our old line dealers came into the factory the other day to place an order for 300 Wright Pipeless Heaters. "It's wonderful the way my territory has taken to this Wright system. Looks to me like a pipeless age," he said.

### THE WRIGHT IS RIGHT

No wonder it's a pipeless age when there's a heating system as good as the Wright. The Wright is the furnace other manufacturers have tried to imitate.



*Write today for Wright literature and you'll agree the Wright is right.*

**THE MAHONING FOUNDRY CO.**  
622 Poland Ave. Youngstown, Ohio  
Eastern and Western Warehouses for convenience of trade.



## WRIGHT PIPELESS HEATERS



ESTABLISHED 1880

Representative of  
The Hardware, Stove,  
Sheet Metal, and Warm  
Air Heating and Venti-  
lating Interests

# AMERICAN ARTISAN and Hardware Record

Address all communications and  
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AND  
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Many retailers are already inquiring as to what they should do in the matter of replenishment, and many of them are placed in an embarrassing position, fearing that if the present price-cutting wave should continue they may find themselves loaded with high-priced stocks.

## Now Is the Time to Buy

The opinion among wholesalers is that if retailers do not cover their requirements now, the wave of buying which will come later to replace stocks now being disposed of will make it impossible for the wholesalers to supply the demand and country merchants may therefore find themselves short of stock in the busy season.

The safest thing for merchants to do now is to cover their requirements cautiously, not committing themselves too far ahead, but watching the situation closely so that they may be ready to cover still further ahead if the situation changes suddenly.

The price movement from now on instead of being steadily upward as it has been, is likely to be wavy, showing numerous ups and downs but with the gradual tendency downward.

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The working of credit control through increased discount rates has been successful,

## The Control of Credits

according to a review of the situation contained in the monthly bulletin of the Federal Reserve board.

On this subject the review says: "The question constantly asked within the past few months has been the relationship noted between control of credit, the application of higher discount rates and the actual expansion of operations. The evidence is still conflicting and lacking in certainty as to details.

"The general conclusion to be drawn is unmistakably to the effect that the operation of

credit control through higher discount rates has had a marked success. It is true that during the earlier period of its application, in the months of November and December, 1919, and January and February, 1920, an absolute check to the growth of rediscounting at Federal Reserve banks was not afforded. This fact, however, should be interpreted not in the light of absolute figures, but rather in that of relative conditions.

"There was, in fact, during the months in question an absolute increase in the total amount of rediscounted paper held by Federal Reserve banks, but the real question at issue is not whether there was an absolute increase, but whether the increase which actually occurred would have been higher had it not been for the application of this method of credit control. On that point there would seem to be no doubt."

The success in thus controlling the growth of credit has been the more noteworthy because of the difficult conditions which have prevailed, chief among which has been the very unsatisfactory transportation situation, which was in part the result of a lack of equipment on the part of the railroads and in part the consequence of the very severe weather of the late winter.

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We are still a million miles or more from the end of improvements in hardware merchandising. Mechanically, we

## A Good Example.

are making big strides. But the most important and promising field of improvement is in the human side of selling. Recently, the merchants of Cleveland, Ohio, through the Better Business Commission of the Cleveland Advertising Club, started a system of "Shopping for Service," for the direct benefit of the stores. The purpose of the system is to assay the character and performance of the

different clerks on duty in the various shops.

The system is based upon the conviction that the service which the clerk renders is almost as important as the merchandise which he sells in determining whether the customer will be well enough satisfied to desire to come back again. Those who do the shopping turn in a report to the Better Business Commission in which certain questions are answered.

The shopper tells whether she had to wait for attention, describes the appearance of the clerk, notes what manner of greeting she received, tells whether the clerk appeared interested and wanted to help, reports whether the clerk made any suggestions, had any good talking points, offered any good substitute, was acquainted with stock, invited the customer to call again, or showed any particular courtesies.

Now this plan might be tried out with profit by local associations of hardware dealers in towns where they do not chance to be affiliated with the Better Business Bureau, working in conjunction with the Advertising Club.

♦ ♦ ♦ ♦ ♦

There are hundreds of ways to promote the sale of fishing tackle. Every one of them implies some form of practical service to the customer. An inexpensive way is to supply a printed card or slip, bearing the dealer's name and address, with instructions for removing fishhooks that become caught in some part of the flesh.

#### **Removing Fishhook**

The advice is issued by the United States Public Health Service and is prefaced by the caution, "If a physician is available it is best to cut the line from the hook and entrust its withdrawal to an expert."

Continuing, the directions which have been published in one of the American Red Cross bulletins, lay down the following first aid principles:

When the barbed end of a fishhook has entered the flesh, do not attempt to remove it by pulling it directly out. Such a procedure will cause great laceration and tearing of the tissues. The better plan is to depress the shank of the hook, push the point forward and onward in an upward direction and bring it out on the surface at another point. The barbed end is then cut off with a wire

cutter or file. The barbed end having been removed, the hook can be extracted by pulling on the shank without damage to the tissues.

♦ ♦ ♦ ♦ ♦

In every language under the sun school children have had dinned into their ears that knowledge is power. It is true.

**Knowledge** The chapters of history are  
**Is Profit** crowded with examples of it.

What the average merchant and salesman need today is a new form of that ancient saying: knowledge is profit. The more you know about the goods you sell the better you can sell them and the more of them you can sell.

Study your goods. Learn how they are made and how they operate. In the matter of hammers, for example, find out why the use of vanadium steel is an advantage, why a certain weight of hammer head is best for certain kinds of work. Do some experimenting.

Take a thin casing nail and try to drive it with an extra heavy hammer. You will note that in most cases the nail will buckle under the blow. Selling hammers, then, is not merely a matter of taking the customers' money.

In nearly every instance you can sell two hammers instead of one by explaining and, if need be, demonstrating the difference between weights for given kinds of work. Knowledge is profit.

♦ ♦ ♦ ♦ ♦

The presidential campaign will soon be in full swing. There is likely to be much partisan bitterness. Some people take life so seriously that they would not buy a pound of nails from the hardware dealer who belongs to a different church or lodge or political party from them. Therefore, it is wise to avoid all political discussions in the store during business hours. It is almost impossible to remain cool and judicial when arguing for or against the League of Nations or the Protective Tariff or Intervention in Mexico. The prospective customer with whom you may become embroiled in a debate on the Democratic or Republican platform is likely to lose his temper and quit trading with you. There are plenty of safe topics for conversation. Do not mix politics or religion in your business.

#### **Business Politics**



## Random Notes and Sketches

By Sidney Arnold

Have you ever read Mark Twain's "Sermon to Salesmen"? The famous humorist went to church and heard a missionary talk. He says: "He was the most eloquent orator I ever listened to. He painted the benighted conditions of the heathen so clearly that my deepest passion was aroused. I resolved to break a lifelong habit, and contribute a dollar to teach the gospel to my benighted brethren. As the speaker proceeded I decided to make it five dollars, and then ten. Finally I knew it to be my duty to give the cause all the cash I had with me—twenty dollars. The pleading of the orator wrought upon me still further, and I decided not only to give all the cash I had with me but to borrow twenty dollars from my friend who sat at my side.

"That was the time to take up the collection.

"However, the speaker proceeded and I lost interest and finally dropped off into a sweet slumber; and when the usher woke me by prodding me in the ribs with the collection plate, I not only refused to contribute, but am ashamed to state that I stole fifteen cents from the plate."

\* \* \*

My friend, Hamp Williams, the widely known hardware dealer of Hot Springs, Arkansas, is a strong advocate of business loyalty. He sends me the following story as a pertinent example thereof:



The train wreck occurred just two miles west of a small Missouri town and the editor of the local paper sent out his star (and only) reporter to get a story of the accident. Arrived at the scene of the wreck, the reporter found the train crew reluctant to

talk for publication.

Finally the conductor of the train candidly confessed that it was against the policy of the road to give out particulars of such accidents.

"However," he concluded, "over there, sitting on that tie, is the superintendent of this division. If he wants to tell you anything, why, all right."

The reporter approached the designated man and found him with his face badly scratched and one arm in a sling. "Can you give me any particulars concerning this wreck?" the reporter asked.

"Wreck?" repeated the injured man. "Young fellow, if there has been any wreck on this road I haven't heard of it!"

\* \* \*

Motives and intentions are more vital than the words which express them, says my friend H. E. Doherty of the Safety Furnace Pipe Company, Detroit, Michigan, and President the Salesmen's Auxiliary to the Michigan Sheet Metal Contractors' Association.

By way of illustration he quotes this tale:

"Two men got into a fight in front of the bank today," said a man at the family tea-table, "and I tell you it looked pretty bad for one of them. The bigger one seized a huge stick and brandished it. I felt that he was going to knock the other's brains out, and I jumped in between them."

The family had listened with rapt attention, and as he paused in his narrative the young heir, whose respect for his father's bravery is immeasurable, proudly remarked:

"He couldn't knock any brains out of you, could he, father?"

\* \* \*

I owe a genuine Havana filler cigar to my friend, Leon D. Nish, Secretary Illinois Retail Hardware Association, Elgin, Illinois, for the following bit of humor.

"I see that another effort to get in communication with Mars has ended in failure."

"Yes. I don't think they will ever be able to communicate with Mars unless they first notify her that they are going to send a signal so that she will be on the lookout for it."

\* \* \*

I met my friend, Robert C. Johnson of the National Screw and Tack Company, Chicago, Illinois, at the Hardware Club the other day.

He gets just as much fun out of a pun as I do. Here's one he told me:

"Say, Harold, did you know that I had a new job?"

"No, what is it?"

"Oh, I'm blacksmith down to the candy kitchen."

"I don't get you, what do you mean?"

"Just what I said, I shoo flies."

\* \* \*

It is important to cultivate a retentive memory, declares my friend Charles Peffley of George M. Clark and Company, Chicago, Illinois. Here is proof:

"Why have you quarreled with Walter?"

"Because he proposed to me last night."

"Well, there's no harm in that!"

"But I accepted him the night before."

\* \* \*

Golf is certainly an absorbing game. During the time of the year when the links are open, some of my friends stay out till it is almost too dark to see the shape of a niblick. Their families will appreciate the flavor of these verses from Cottrel's magazine:

### Ain't It Grand?

"Who's the stranger, Mother dear?  
Look! He knows us! Ain't he queer!"

"Hush my own! Don't talk so wild,  
That's your father, dearest child!"

"He's my father? No such thing!  
Father died, you know, last spring!"

"Father didn't die, you dub!  
Father joined a golfing club.  
But they closed the club, so he  
Had no place to go, you see!  
No place left for him to roam—  
That's why he is coming home."

"Kiss him—he won't bite you, child—  
All them golfing guys look wild!"

# Up-to-the-Minute News Siftings

*Items of Interest to Dealers Gleaned from Many Fields.  
National and Local Business Plans, Problems, and Practices.*

## CARRY GOOD LINE OF STOVES.

Sell cheap stoves if you must, but sell good stoves if you can—this is a good axiom. Value, not price, is the one safe guide for the purchaser in buying a stove, and this is a fact you should emphasize.

The stove peddler and the catalogue house, although they feature price, do not neglect to talk quality. The home town merchant has an advantage in this that he is right on the ground; he can best meet the outside competition by emphasizing value, even to the extent of an actual comparison.

A stove dealer who has some trouble with mail order competition carried out this idea to the letter. On his floor he shows the range which the catalogue house operating actively in his territory is featuring as a leader.

Side by side with it are the ranges he himself is featuring. If a customer protests: "I can get a range from Chicago for ten dollars less and it's every bit as good," the merchant calmly says:

"You don't need to send to Chicago for it. You can get it right here. Come here and look it over."

And he compares the ranges, point by point, emphasizing the difference in weight, the difference in metal work, the oven, the fuel economy, and a host of other points.

That sort of comparison is usually a clincher, unless the customer is of an exceedingly penny-wise type. It meets the outside competition fairly and squarely. That, in itself, creates a good impression upon the customer.

Another dealer did not go so far, but he adopted similar methods. He compared his range with the one pictured in the catalogue, following the same lines of comparison.

Yet another dealer got hold of a catalogue house range that had proven unsatisfactory after a very short career. He carries it with his ranges as a sort of horrible example. It is very effective.

It is not enough to show that buying from the mail order house is poor business: it is even more vital to show that buying at your store is good business.

## Stove Company Has Semi-Annual Sales Conference

Under the direction of E. F. Glore, Sales Manager, the Eastern representatives of the Abram Cox Stove Company met August 2, and 3, 1920, in a semi-annual sales conference at the Bellevue-Stratford hotel, Philadelphia, Pennsylvania.

The opening address was made by Robert A. Patton, president of the Company.

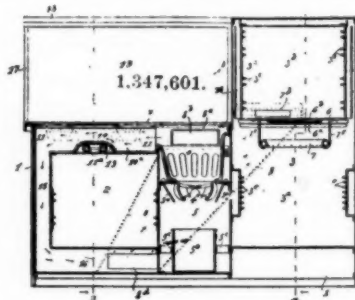
All branches of the business were discussed in the conference, namely, boilers for heating with steam or hot water; warm air and pipeless furnaces; gas,

coal, and combination gas and coal ranges; water heaters; and laundry stoves.

Particular attention was given to advertising and sales promotion. The wisdom of close cooperation with the dealer received strong emphasis throughout the conference.

## Combination Coal and Gas Range Is Patented.

Thomas E. Taylor, Mansfield, Ohio, has obtained United States patent rights, under number 1,347,601, for a combination coal and gas range described herewith:



In a cooking range, a casing having coal and gas ovens on opposite sides of and heated by a fire box and provided with a chimney flue said casing having separate indirect coal and gas flues surrounding said coal and gas ovens, respectively.

## New Freight Rates Go into Effect August 26th.

New railroad freight rates and passenger fares authorized by the Interstate Commerce Commission will become effective at the same time, August 26th, five days before the expiration of the Government rental guarantee.

A. P. Thom, counsel for the Association of Railway Executives, states that supplemental tariffs covering both freight rates and passenger fares would be ready for submission to the Interstate Commerce Commission by August 21st.

It has been agreed that the supplements will carry simply the statement that all rates in the tariffs referred to by numbers are subject to an increase of such and such a per cent. Supplements carrying the tariff numbers will have to be filed for each of the tariffs now in effect on the railroads.

This form of filing will be completed by the Interstate Commerce Commission. It will take several years to prepare and print the new tariffs that must be issued by all of the carriers.

The railroads are to file an application with the Interstate Commerce Commission making the generally increased rates effective on all export shipments into Canada. The Canadian railroads will file applications with the Canadian Board of Railway Control at the same time, asking application of the same higher rates on all shipments moving to points in the United States.



# The Week's Hardware Record

*What Retailers, Jobbers, and Manufacturers Are Doing.  
Latest Selling Methods. Experiences of Successful Men.*

## HARDWARE COOPERATIVE BUREAU DISCONTINUES AS SUCH.

According to a bulletin issued by S. W. Mifflin, Director Manufacturers' Cooperative Service, the Industrial Cooperation Committee of the American Hardware Manufacturers' Association, after having reported favorably on the progress of cooperation in the industries of the Association, has been discontinued as such. The bulletin says:

"The report having been accepted the Industrial Cooperation Committee has been discharged, and the organization formerly under its supervision, including the office at 9 East 45th Street, has become definitely separated from the American Hardware Manufacturers' Association.

"One of the reasons for this proposed separation was to make it consistent for groups of manufacturers not classed as makers of hardware or kindred products to join in the Bureau activity under the service plan established by the Committee, thus broadening the prospective development of the Service.

"The Bureaus themselves have not been changed, but continue to function with Clark McKercher as counsel and S. W. Mifflin as director, under the revised name of Manufacturers Cooperative Service.

"We hope that the members of the Association will continue to patronize this office and feel at liberty to consult the director. The office is conveniently located, being a very short distance from the New York Central and Pennsylvania Railroad stations.

"The value of having exact information with regard to orders, shipments and productions and on general conditions in any industry is usually appreciated much more readily by manufacturers during a period of depression and on a falling market. If we are facing such a period as some think, and when the value of this trade data and information occurs to you, we hope you will feel at liberty to consult us without restraint.

S. W. MIFFLIN, Director."

## Is Very Much Pleased.

TO AMERICAN ARTISAN AND HARDWARE RECORD:

I am very much pleased with your paper. It's the finest trade journal we have.

Respectfully,

K. T. HEDBERG.

Jersey City, New Jersey, August 9, 1920.

## Women Folk of Buffalo Hardware Dealers Prepare for Outing.

The first annual outing of the wives and daughters of the Buffalo Retail Hardware Dealers will be held Thursday, September 9th. Games of various kinds, cards, and other entertainment will enliven the day. Plenty of dainty things to eat, as well as substantial nutriment, will be at the disposal of all who attend. The outing is for the ladies only.

It is at once a tribute to their goodness and an acknowledgment of their helpfulness on the part of the Buffalo Retail Hardware Dealers' Association.

## Fires Cut Down Building Gains 25 Per Cent.

More than 25 per cent of the value of all new construction in the United States and Canada during the last ten years was destroyed by fire, says the Insurance Field. In the ten years ended with 1919 new construction averaged \$914,000,000 per year in value and the fire losses averaged \$242,000,000, or 26.5 per cent of the value of the new buildings.

The fire losses included goods as well as buildings and are cited by the Field merely to show the heavy fire losses which this country suffers.

The figures which are responsible for the high averages of \$1,000,000,000 per year in new construction were drawn mainly from the years before 1917.

Nineteen-nineteen was the only year of the decade after 1917 that showed new construction of a value above \$1,000,000,000. The new construction in 1918 was valued at less than \$500,000,000 and was less than \$100,000 more than the fire losses for that year.

The fire losses of 1918 were the heaviest of the decade. New construction in 1917 was valued at a little over \$700,000,000.

In 1919 the new construction ran above \$1,300,000, but in 1919 the cost of construction was double that of the earlier years, and it is estimated that the actual building during that year was little more than in 1917.

The new construction of 1916 exceeded \$1,000,000,000, and was the first year to show values above that amount since 1912. From 1914 to 1916 values ran close to \$1,000,000,000 on one or two occasions.

The construction carried out in 1916 was completed before the general wage and price level advanced greatly, and the actual construction represented approximately the volume of a pre-war year, but the

construction was for war purposes, and a great deal of it finally was scrapped.

The regularity of fire losses during the decade contrasted strongly with the irregularity of building.

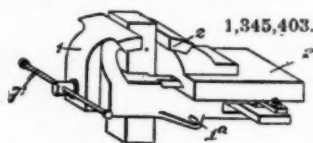
The fairly constant level of fire losses since 1910, when considered in connection with increase in costs, indicates a probable decrease in the volume of property destroyed.

In 1910 the fire losses amounted to \$234,000,000 and, in 1919, to \$268,000,000.

The figures strikingly illustrate the claim that the country is greatly underbuilt.

### ***Is Granted Patent Rights for a Bench Screw.***

Hugo Reisiger, of Rotterdam, Netherlands, has obtained United States patent rights, under number 1,345,403, for a bench screw described herewith:



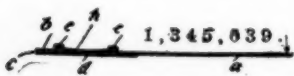
A vise, comprising a pair of jaws, one fixed and the other slidable relatively thereto, a cross member slidably carried by said fixed jaw, a pair of rods slidably carried by the fixed jaw in operative engagement with said cross member, a pair of clutches pivotally carried by said fixed jaw and pivotally connected to said cross member, a depending member carried by said slidable jaw and adapted to slide between said clutches, and means carried by the fixed jaw for sliding said rods thereby to cause said clutches to grip said depending member and force the slidable jaw toward the fixed jaw.

### ***Will Establish a Lock Plant in Portland, Oregon.***

The Arsneau Automatic Tumbler Lock Company, which was recently incorporated with a capital stock of \$300,000, intends to establish a plant for the manufacture of locks at Portland, Oregon.

### ***Gets Patent for Safety Razor***

United States patent rights have been granted to Alessandro Valente, Michael Curzon, and Samuel Curzon, London, England, under number 1,345,039, for a safety razor described herewith:



A safety razor comprising a combined handle and guard component, a clamping plate component, a blade interposed therebetween, a spring pressure element, upstanding portions on one component extending through the blade and the other component, the said upstanding portions at the ends remote from their connection with the first mentioned component being so formed as to cooperate with the other component to engage and hold the said spring pressure element whereby a clamping or drawing together of the components is effected for the purpose described.

### ***Why Pocket Knives Cost More Money.***

A good pocket knife, says the American Cutlery Bureau of Information, costs possibly twice as much today as before the war, but the advance in price is not representative of the actual increase in the cost of producing a first class pocket knife.

Crucible steel used for the blades is costing today 125 per cent more than before the war, while spring steel used for the spring action has increased 100 per cent.

Nickel alloy and brass are offered at varying rates with increases from 100 per cent in the case of nickel alloy and 150 per cent for brass against pre-war rates.

So-called patent stag, used for the making of handles, is costing 150 per cent more while genuine stag has increased 100 per cent.

Ebony costs today four times its pre-war price and similar price increases have been witnessed in the case of other woods used for knife handles.

Advances in the case of perlmutter are 150 per cent, buffalo horn 200 per cent and celluloid is quoted at approximately three times its previous cost.

But the most important increases have taken place in the cost of labor because labor enters into cutlery production at a much higher rate than is the case with other industries.

It is a peculiar fact in this respect that semi-skilled and unskilled labor has been mostly benefited by the wage increases with the result that between 125 to 200 per cent has been added to the wages of these groups of helpers, while the highly skilled operations are paid fully double the pre-war rates.

### ***West Virginia Hardware Firm Becomes Incorporated.***

As the outcome of years of successful business and increasing trade, the Jones Hardware Company, Moundsville, West Virginia, has become incorporated for \$150,000 under the name of the Jones-Branson Hardware Company. G. Branson is president of the new organization.

### ***Get Ideas for Your Store from Your Employes.***

There is no criticism that can possibly be more valuable to your business than that which comes from the organization itself, declares Louis Hirsig of Madison, Wisconsin.

The way to get this criticism, he says, is through store meetings, which should be held at least twice a month. Set a regular night and every one connected with the store should be there.

The first part of the meeting can be taken up explaining and showing new goods.

Then, get suggestions and criticisms on how the store should be operated, how to improve delivery, and what lines you ought to carry or drop. You will be agreeably surprised at the helpfulness of the suggestions and criticisms you will hear.



## How a Hardware and Paint Dealer Turned Failure Into Success by Right Ways of Merchandising.

*He Used the Helps Supplied by Manufacturers and Connected All His Advertising with Window Displays.*

The proprietor of a hardware and paint store in a little Iowa town received an important letter one morning. The communication set forth, politely but very definitely, that the recipient's career as a hardware and paint dealer in that particular store and town was at an end. He was given a choice between voluntary sale in the open market or a compulsory sale conducted by the sheriff. The letter was signed by his three principal creditors.

The action had not been unexpected by the dealer. His business had been steadily going backward. There was no competition for miles around; but somehow the people in the community did not seem to believe in paint. As the story is told in Du Pont Magazine nobody was drawing trade away from him. It was simply that sufficient trade did not exist. For the past few months he had been losing money on the store. The sales had not been enough to meet the overhead, small as it was. There were no employees. It was one of those cases which, although not general, are not uncommon in the hardware and paint trade.

In a way, he was glad the climax had come. Perhaps it was true, as his creditors had kindly suggested in their letter, that he could achieve a greater success in some other line or field. But that was a question for the future. The immediate problem was to dispose of the store building, which he owned, and the stock.

He looked the place over appraisingly. It was a dark, dingy, rambling old building, the front much the worse from the rain and weather, and the gloomy interior showing the marks of long, hard and careless usage. Like a disorderly rabble, cans of paint sat in chaotic disarrangement on the dusty shelves. The fixtures and counters, long-suffering and aged, were dark, drab and forbidding. Altogether it was not a prospect that would attract a prospective purchaser for the establishment.

The proprietor let it be known throughout the town that he wished to sell out, but the townspeople, aware of the circumstances, evinced no interest. They believed, as did he, that the community was not large enough to support a hardware and paint store.

Finally, through trade channels, a young clerk in a store located in a city a hundred miles distant, heard of the small-town store. He had been preparing himself and saving his money for just such an opportunity. He had carefully read the leading trade journals,

*Increase in the value of houses and barns, as a result of painting them, shows a big profit on the cost of painting. This is a selling argument which no dealer should neglect to use. Unpainted properties depreciate in value, while painted buildings command a premium. If everybody paints, the result will be a community of higher values, greater attractiveness, and increased prosperity for all. Surface protection, plus pleasing colors, develops a wholesome community pride by which everyone profits directly or indirectly.*

studied all the paint manufacturers' literature he could get, mastered the principles of color harmony and interior decoration, acquired expert knowledge on the uses of the various kinds of paint and their adaptation to different purposes, and, in short, thoroughly equipped himself to render helpful, intelligent, constructive service to the paint-using public. He had familiarized himself, too, with up-to-date methods of merchandising and salesmanship. He decided to investigate the proposition.

He went to the town and looked at the store. He sized up the community. After much

dickering on the part of the departing owner, the young man bought the store at its assessed valuation and the stock at inventory less a reasonable deduction for depreciation.

Two weeks later he stood in the store, its proprietor. Soon the local wiseacres began to drift in. They wished him success, but left no doubt in his mind as to their estimate of his chances. To all of them he returned his cordial thanks. He smiled a little at their thinly veiled condolences. He had seen the situation, when he bought the place, just as clearly as they could describe it to him, but he refrained from telling them so. When one visitor, more outspoken than the others, had frankly assured him that "this here town don't believe in paint," he smiled more broadly than before, for the assurance simply confirmed his judgment. The first day he had seen the town, he realized that the community had not been using paint with very great regularity or frequency. He reasoned that, because of this fact, here was an ideal place in which to preach the gospel of paint and its value. The town, he felt, was ripe for a vigorous paint drive.

He started his campaign in his own store. He painted the front, then the interior, and finally, the counters, shelves and fixtures. The cans of paint were carefully dusted, placed in orderly arrangement and augmented until a well-rounded attractive stock had been developed. Specialties were added, and a good assortment of brushes, putty knives and other painting accessories stocked. Window displays and various store-helps, supplied by the paint manufacturer, were used to good advantage.

A list of people whose homes and outbuildings needed painting was compiled. An illustrated mailing folder, also furnished without cost by the manufacturer, and a letter were sent to each person on the list. Attention was called to the improved appearance of the

store. An itemized statement of the cost of painting the store was given.

"I bought the store at its assessed valuation," the letter frankly concluded, "and I think you will agree with me that it is now worth several hundred dollars more. I feel sure, too, that the value of the buildings in my vicinity has been increased by the improvement in my property. Paint will do just as much—or more—for your house as it has done for my store. No harm to investigate anyhow. Stop in, and let's figure a bit on the cost of painting your house. It will pay you to paint. Certainly it is worth your time to investigate. I'll look for you soon."

This was supplemented by appropriate advertising in the local weekly. Electrotypes of well-designed and splendidly illustrated advertisements were supplied, free of charge, by the paint manufacturer. These, of course, meant a big saving on advertising expense.

On the third day after his little campaign had been put out, two property owners called in response to his invitation to investigate. For each of them he went into exhaustive detail. He suggested color schemes, outlined specifications of the proper paints to use, estimated on quantity and cost and calculated the approximate amount of labor that would probably be required for each job. Against the cost totals, he placed what the prospective customers agreed was a reasonable expectation of increased value in the respective properties as a result of painting.

One prospect at once ordered the paints specified; the other took home the data to discuss it with his wife. She had long cherished a keen desire for an attractive home, but the bugaboo of cost had restrained her from suggesting to her husband the idea of painting. The demonstration of financial gain, however, immediately won her enthusiastic approval for the project, and the paint was bought a few days later.

The advertising campaign continued in the local paper. A number of people came into the store for suggestions and figures on various small paint jobs. A fair proportion of these bought. In the meantime, the two house painting jobs developed by the initial mailing campaign were completed. This was the occasion for a second mailing of letters to those who had not responded to the first suggestion.

"Mr. Ira Green, on Fairview Road, and Mr. Nathan Harris, who lives opposite the school house, have just painted their homes," said this letter. "Both houses look beautiful, as I feel sure you will agree when you see them. I do not feel free to say what the job cost in either of these cases, but both gentlemen assure me that, according to their figures, the increase in the value of their properties shows a profit of several hundred per cent on the cost of painting. Neighbors of both men have also said that the painting has very definitely raised the tone of the respective neighborhoods."

"Shortly after I came to town, I took the liberty of pointing out to you what painting had done for my store. I suggested that paint would also improve your property. Come in and talk it over. Mr. Harris and Mr. Green found it profitable to do so, and I am sure you will too."

This campaign brought three new prospects, every

one of whom was finally "sold" for the painting of his house. When the jobs had been finished, another letter campaign, supplemented by newspaper advertising, was used. The appeal this time was on community real estate values.

"Real estate values in our town are rising," began this letter. "Five properties have recently been painted, and every one of them is held at a figure considerably higher than before the painting. Properties in the vicinity of these painted houses have also increased in value. Painting will add further to their worth."

"Unpainted properties in our town are fast depreciating in market value, while painted buildings are commanding a premium. Your property needs painting. The cost will be trifling compared with the increase in value."

"If everybody paints, the result will be a community of higher values, greater attractiveness and increased prosperity for all. The owners of painted properties will reap the greatest advantage. An attractive town will draw new residents from the outside and encourage outside capital to invest here. Come in and talk it over. Let me help you get your share of the general prosperity."

The community appeal "got across." The logic of higher values throughout the entire community was quickly grasped by property owners. At the end of about two and one-half years, the town became known throughout the state for its attractiveness, cleanliness and progressiveness. It became a "painted town" in a very real sense. The improved appearance of the community brought about by painting led to the development of a wholesome pride on the part of home owners in the neat and attractive appearance of their dwellings and surroundings. Old walks were repaired and new ones laid, fences were fixed, lawns cared for and hedges trimmed. A general air of thrift and comfort pervaded the town.

Newcomers in the section, hunting desirable locations for their homes, were attracted to the place. Every dwelling was occupied and, in the course of two years, over twenty new houses were built to take care of the influx. Promoters of new industries, having in mind agreeable living conditions for their workers, began to inquire into the possibilities of the place. During the second year after the inauguration of the "community paint campaign," a linoleum factory and a knitting mill located in the town. The local hotel, once a dingy place invariably avoided by travelers who could possibly get to the next town before night, became, thanks to paint and a little "fixing," an inviting, comfortable-looking hostelry that attracted the favorable attention of motorists and commercial men. Thus the town grew, and the progressive young paint dealer's store with it.

Once he had established the "increased value" idea in the community, he followed it up with educational propaganda. He talked "surface protection" to his customers. He began to develop in the community an interest in the esthetic values of color. He introduced his public to the pleasures of attractive color schemes for interiors. He gave out practical, helpful information on wood finishing and wood finishing methods.

With the assistance and cordial cooperation of the



paint manufacturer whose line he carried, he installed, in one corner of his store, a small but comprehensive "Service Department." Here were displayed sets of large panels, showing various paint, varnish and stain effects on many different woods. Small model doors finished in different ways and panels showing effects obtainable with wall paint, were also features of the display.

A plentiful supply of informative literature, furnished by the manufacturer, was kept on hand. This "Service Department" became the town's headquarters for information and guidance on decorative problems of all sorts, from the painting of a house to the "doing over" of a piece of furniture. The panels enabled the prospective customer to see exactly how the proposed job would look when finished. The dealer gave his personal attention to his "Service Department" and supplemented the exhibits and literature, whenever it seemed desirable, with helpful suggestions and "pointers."

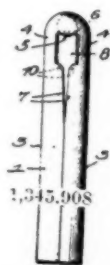
Far-sighted in his business policies, he frequently pointed out to customers more economical methods of doing a job than the one proposed. The good will developed by this practice alone was tremendous both in strength and extent. Thus came back, in a very practical way, the bread of community-betterment propaganda which this alert young man had cast upon the stagnant waters of a once indifferent public opinion.

There is nothing unusual about this dealer's achievement. He simply realized, as every successful paint dealer must, that people do not buy paint as paint. He recognized that paint prospects must be "sold on the idea" of increased property value, protection or beauty—or, perhaps, all three—before they can be induced to exchange cash for paint.

This particular dealer began his sales effort by talking increased values to property owners. It was a case of persuading property owners of the possibilities in their own properties—in short, of selling the community to itself and literally "painting it into prosperity."

### **Is Granted Patent Rights for Caster Socket.**

Under number 1,345,908, United States patent rights have been granted to Charles S. Barnard, Bridgeport, Connecticut, assignor to The Bassick Company, of Bridgeport, Connecticut, a Corporation of Connecticut, for a caster socket described as follows:



In a socket for top bearing casters, a sheet metal body having a rounded top forming a ball chamber, and a ball in the chamber, the socket having cut-out side portions below the chamber and having integral ears which are bent inwardly from the cut-out portions and engage beneath the ball.

This device is structurally simple and, therefore, its manufacture presents no difficulties, and can be carried on with maximum degree of economy.

### **Poultry Supplies Are Source of Profit to Hardware Store.**

Of late years even amateur or backyard poultry men (and women) have studied the more scientific methods of handling fowl and the best producing breeds and the best way to keep them healthy and producing both meat and eggs.

One of the chief essentials in poultry raising is to keep fowl properly housed and protected against animals; this perhaps applies especially in country districts.

Too often the farmer allows his fowl free range, with the result that many a bird is lost and many dozens of eggs are unaccounted for.

The saving of time which may be the result of caring for or rather neglecting his poultry stock in this way does not overcome the actual loss resulting from allowing his birds to wander at will over the farm.

The hardware dealer can do much to educate the farmer and amateur poultry man in the proper care of fowl—proper crops, yards, supplies, etc.

In the first place you are perhaps the first man the would-be poultry fancier gets in touch with, for among the first things he does is to buy poultry netting either for the constructing of his pens or enclosing his run-way, or both.

By knowing the needs of the properly-equipped poultry yard and pen and keeping such lines as are necessary in stock you can give your customer the right start.

Besides selling him his requirements you should get the opinion of some good poultry men in your districts regarding the care of chicks, etc., so that you can give the beginner real sound advice. It will work out to your benefit as well as give a patriotic service to your community.

You may find it advisable to stock incubators, brooders, hovers, etc. Now is the time they should sell.

Have a stock of drinking fountains, feed dishes, dry mash hoppers, etc. on hand. Show them in your windows. Have them on display inside the store.

Let the poultry fancier know you can supply him. This is a big and growing industry—treat it in a big way—encourage it and you will be one to benefit.

### **Registers Trade-Mark for Saws in Patent Office.**

Under classification number 23, namely, cutlery, machinery, and tools, and parts thereof, registration has been granted to the Simonds Manufacturing Company, Fitchburg, Massachusetts, for the trademark reproduced herewith. The particular description to which it is applied is saws. The Company claims the use of this trade-mark since 1906. Application for registration of this trade-mark was filed May 22, 1920.



# Good Ideas for Window Display

*Practical Lessons from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition. How to Get More Passers-By to Come into Your Store.*

## ARTISTIC BACKGROUND HELPS DISPLAY OF CUTLERY.

Only a man hurrying to the dentist with a nerve-racking toothache, or a thief with a dozen policemen close on his heels, would fail to stop to examine the window display shown in the accompanying illustration.

It was arranged by Charles Byford for the Mills Hardware Company, 95 King Street East, Hamilton,

A highly commendable characteristic of this cutlery display is the liberal use of price cards in connection with the various articles.

The large checkerboard design of the window floor gives the designer an opportunity to individualize certain of the articles most effectively.

Mr. Byford is foremost among window trimmers of Canada because he considers no time or labor wasted in giving attention to the smallest details when planning window displays.



Window Display of Cutlery Awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition. Arranged by Charles Byford for the Mills Hardware Company, 95 King Street East, Hamilton, Ontario, Canada.

Ontario, Canada, and awarded Honorable Mention in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

Its attractiveness is manifold. The background is uncommonly artistic. The wall pockets filled with flowers are works of art in the gracefulness of their design.

Although a comprehensive assortment of cutlery is shown, there is no impression of crowding in the space at the disposal of the window exhibit.

He studies the art of window advertising and makes it a point always so to arrange his exhibits as to produce pleasing impressions as well as to tell a graphic convincing story of the commodities to the passers-by.

In the description which accompanies photograph of this cutlery display, Mr. Byford says:

"Backgrounds are considered by many to be important in arranging good displays. I consider them very important. Would this cutlery display stand



out as well if it had only a shabby curtain strung around it or an open back?

"The background in this display is made entirely of wall board. The end pieces are covered with onyx marble paper. The center panel is painted green and the wings green—which makes a pleasing contrast.

"The floor of the window was also covered with wall board, painted in eight inch squares cream and green to match the background.

"The wall pockets and knife display boards were made of wall board and finished in the same color as the background.

"Black velvet was used to drape the pedestals and also a portion of the floor.

"Practically everything in cutlery was shown in this display and price tickets were freely used.

"This display was arranged in July, considered by many to be a quiet month. But, in checking up the sales for the two weeks that this display was in, it showed that over \$400.00 worth of cutlery had been sold.

"It is remarkable, too, that the sales for the second week were nearly twice those of the first week, which proves that it is sometimes profitable to leave a display in longer than a week.

"The old saying that 'Goods well displayed are half sold' was amply proved in this display.

"The blind on the left was drawn to prevent reflection."

### **Shows Large Increase in Hardware Prices.**

Prices on hardware and kindred lines have increased approximately 170 per cent for the period beginning January 1, 1915 and ending June 1, 1920.

Among the articles listed are hammers, with an advance of 296 per cent, which had the highest rate of increase and wire shoe nails the smallest with 22 per cent.

A part of the comparative hardware price compiled by A. J. Bihler, James C. Lindsay Hardware Company, Pittsburgh, and issued by the National Hardware association, Philadelphia, are as follows:

Article	Per cent	Article	Per cent
Augers .....	122-132	Plows .....	73
Axes .....	135	Pulleys .....	180-260
Bars, steel		Pumps .....	192
crow .....	239	Punches .....	233
Bits, auger ....	70-293	Rivets .....	110-275
Bolts .....	122-271	Saws .....	95-140
Chains .....	158-230	Screws .....	164-218
Drills .....	82-167	Shoes, horse ..	80
Files .....	118-167	Shovels .....	185
Hammers .....	256-296	Sledges .....	135
Hinges .....	144-264	Steel, tool ....	161
Hatchets .....	219	Stocks and dies	136
Locks .....	137-243	Vises .....	139-208
Mattocks .....	251	Wedges .....	270
Nails .....	22-287	Weights, sash .	233
Netting .....	117-119	Wire .....	118-131
Picks .....	251		

The advance in freight rates, which is soon going into effect as a consequence of the railroad wage award, is estimated to be about twenty-nine per cent. It will have to be absorbed by the commodities carried in transportation. This means that there is scant likelihood of any decrease in hardware prices during the present and forthcoming seasons.

### **Gets United States Patent Rights for File.**

Under number 1,345,890, United States patent rights have been granted to Charles Otto Schneider, Wimbledon, London, England, assignor to The Patent File and Tool Company, Limited, London, England, for a file described herewith:



A file having teeth of arcuate form extending across the surface of the file, the generating centers of the arcs of said teeth lying on a line inclined to the axis of said file.

Usually when an inventor assigns a patent to an established manufacturing organization, it is evidence that the device has practical merit. In the present case, the arcuate form of teeth extending across the surface of the file with the generating centers of the arcs inclining on a line to the axis, appears to be an improvement on the ordinary system in use.

### **New York City Hardware Dealers Plan Outing.**

Preparations have been completed for the Ninth Annual Outing and Clam Bake of the Hardware and Supply Dealers' Association of Manhattan and Bronx Boroughs, New York City. It is to be held at Duer's Park, Whitestone Landing, Long Island, September 9th. The steamer will leave the Battery at 9 a. m. sharp. An interesting program of entertainment has been arranged for the day. The committee in charge promises to keep everyone in good humor and thoroughly satisfied from start to finish.

### **Organizes to Deal in Hardware.**

With an initial capital of \$100,000, G. C. Winter Company has been incorporated at Southbridge, Massachusetts, to manufacture and deal in hardware, tools, and similar commodities. Maurice A. Taylor is president of the new corporation.

### **Trade Opportunities in Foreign Lands.**

The Bureau of Foreign and Domestic Commerce, through its Special Agents, Consular Officers and Commercial Attachés, is receiving information of opportunities to sell hardware and kindred lines in several foreign countries. Names and locations will be supplied on request to the Bureau in Washington or its District Offices. Such requests should be made on separate sheets for each opportunity, stating the number as given herewith:

33440.—A general merchant dealer in India desires to secure the representation of firms for the sale of stoves and accessories. References.

33461.—The manager of an importing company in South Africa is in the United States for a short time and desires to be placed in communication with manufacturers of staple lines desiring to enter South African markets. Reference.

33462.—A firm of merchants and commission agents in India desires to secure agencies for the sale of hardware such as wood screws, iron hinges, nails, bolts, fencing wire, wire ropes, carriage and roofing bolts, steel bars, plates, angles and tees, steel rails, galvanized sheets, brass and copper sheets, pipes and piping, blacksmiths' and carpenters'

tools, tool steel and spring steel, enamel ware, etc. References.

33463.—A hardware merchant firm in Mexico desires to purchase hardware, paints, woodenware, electric flash lights and batteries, paint brushes, chinaware, enamel ware, fruit jars. Quotations should be given c. i. f. El Paso, Tex. Payment to be in cash. Correspondence may be in English. Reference.

33466.—The proprietor of a merchant firm in Spain is in the United States and desires to purchase hand-operated horticultural and agricultural machinery for small farms and gardens. Reference.

33470.—An importer for the Red Sea market desires to receive catalogues of various cooking utensils and kitchen hardware, such as enameled ironware, aluminum ware, galvanized-iron buckets and cups, cheap knives, forks, and spoons. Quotations should be given c. i. f. Red Sea port. Reference.

33471.—A manufacturing firm in India desires to purchase electric flash lamps, torches, and other novelties and goods. Quotations should be given f. o. b. New York. Cash to be paid. References.

33479.—A company of import merchants in India desires to purchase sundries of all descriptions, cutlery, locks, and general merchandise. Quotations should be given c. i. f. Karachi. Terms to be 30 days' sight or documents against payment through bank. Reference.

33482.—A merchant in Italy desires to secure an agency for the sale of hardware, kitchen utensils, etc. Payment to be cash or confirmed credit. Correspondence may be in English. References.

## Coming Conventions.

Southern Association of Stove Manufacturers, Hotel Cleveland, Cleveland, Ohio, August 30, 31, and September 1, 1920. W. H. Cloud, Secretary, 216 Glendora Avenue, Louisville, Kentucky.

American Hardware Manufacturers' Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 20, 21, and 22, 1920. F. D. Mitchell, Secretary-Treasurer, 4106 Woolworth Building, New York City.

National Hardware Association, Marlborough-Blenheim Hotel, Atlantic City, New Jersey, October 20, 21, and 22, 1920. T. James Fernley, Secretary, Philadelphia, Pennsylvania.

Automotive Equipment Association, Coliseum, Chicago, Illinois, November 15, 16, 17, 18 and 19, 1920. William M. Webster, Commissioner, 1813-1818 City Hall Square Building, Chicago, Illinois.

Automobile Accessories Branch of the National Hardware Association, Coliseum, St. Louis, Missouri, November 30, December 1, 2, and 3, 1920, headquarters, Hotel Statler. T. James Fernley, Secretary-Treasurer, 505 Arch Street, Philadelphia, Pennsylvania.

Texas Hardware and Implement Association, Adolphus Hotel, Dallas, Texas, January 18, 19, and 20, 1921. A. M. Cox, Secretary, 1808 Main street, Dallas, Texas.

Western Retail Implement, Vehicle and Hardware Association, Kansas City, January 18, 19 and 20, 1921. H. J. Hodge, Secretary, Abilene, Kansas.

Pacific Northwest Hardware and Implement Association, Seattle, Washington, January 18, 19, 20, and 21, 1921. E. E. Lucas, secretary, Hutton Building, Spokane, Washington.

Missouri Retail Hardware Association, Planters Hotel, St. Louis, Missouri, January 25, 26, and 27, 1921. F. X. Becherer, secretary, 5106 North Broadway, St. Louis, Missouri.

Indiana Retail Hardware Association, January 25, 26, 27 and 28, 1921. (Place to be announced later.) G. F. Sheely, Secretary, Argos, Indiana.

Oregon Retail Hardware and Implement Dealers' Association, Portland, Oregon, January 25, 26, 27, and 28, 1921. E. E. Lucas, secretary, Hutton Building, Spokane, Washington.

Kentucky Hardware and Implement Dealers' Association, Louisville, Kentucky, January 25, 26, 27 and 28, 1921. J. M. Stone, Secretary, Sturgis, Kentucky.

Nebraska Retail Hardware Association, Hotel Rome, Omaha, Nebraska, February 1, 2, 3 and 4, 1921. George H. Dietz, Secretary, Lincoln, Nebraska.

Wisconsin Retail Hardware Association, Milwaukee, Wisconsin, February 2, 3 and 4, 1921. P. J. Jacobs, Secretary, Stevens Point, Wisconsin.

Oklahoma Hardware and Implement Association, Oklahoma City, February 8, 9, and 10, 1921. W. B. Porch, secretary-treasurer, Oklahoma City, Oklahoma.

The Michigan Retail Hardware Association, Grand Rapids, Michigan, February 8, 9, 10, and 11, 1921. Arthur J. Scott, Secretary, Marine City, Michigan.

Iowa Retail Hardware Association, Des Moines, Iowa, February 8, 9, 10, and 11, 1921. A. R. Sale, secretary-treasurer, Mason City, Iowa.

Pennsylvania and Atlantic Seaboard Hardware Associa-

tion, Incorporated, Convention and Exhibition, Philadelphia Commercial Museum, Philadelphia, February 8, 9, 10, 11, 1921. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh.

Illinois Retail Hardware Association, Hotel Sherman, Chicago, Illinois, February 15, 16 and 17, 1921. Leon D. Nish, Secretary, Elgin, Illinois.

California Retail Hardware and Implement Association, San Francisco, California, February 15, 16, and 17, 1921. LeRoy Smith, secretary, 112 Market street, San Francisco, California.

Minnesota Retail Hardware Association, St. Paul Auditorium, St. Paul, Minnesota, February 15, 16, 17, 18, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Ohio Hardware Association, Columbus, Ohio, February 15, 16, 17 and 18, 1921. Hotel Headquarters, Deshler Hotel, Exhibition in Memorial Hall. James B. Carson, Secretary, Dayton, Ohio.

New England Hardware Dealers' Association, Mechanics' Building, Boston, Massachusetts, February 21, 22, and 23, 1921. George A. Fiel, secretary, 10 High street, Boston, Massachusetts.

New York State Retail Hardware Association, Rochester, New York, February 22, 23, 24, and 25, 1921. John B. Foley, Secretary, 607 City Bank Building, Syracuse, New York.

South Dakota Retail Hardware Association, Sioux Falls, South Dakota, February 22, 23, 24, 25, 1921. H. O. Roberts, Secretary, Metropolitan Life Building, Minneapolis, Minnesota.

Panhandle Hardware and Implement Association, Amarillo, Texas, May 8, 9, and 10, 1921. Troy Thompson, Secretary, Treasurer, Dalhart, Texas.

Hardware Association of the Carolinas, Charlotte, North Carolina, May 10, 11, 12, and 13, 1921. T. W. Dixon, secretary-treasurer, Charlotte, North Carolina.

Southeastern Retail Hardware and Implement Association (composed of Alabama, Florida, Georgia and Tennessee), Atlanta, Georgia, May 17, 18, 19 and 20, 1921. Walter Harlan, Secretary, 701 Grand Theater Building, Atlanta, Georgia.

## Retail Hardware Doings.

### Iowa.

Sloan & Son have sold their hardware and grocery business at Legrand to Wilhau, Halverson and Company, who conduct a similar business at Marshalltown.

### Indiana.

The Midwestern Hardware Company at Anderson have been incorporated with a capital of \$35,000. The incorporators are William J. McGruff, William J. Kimberly, and Elson C. Wildman.

### Michigan.

Slack Brothers hardware and implement store at Bad Axe has been incorporated with a capital of \$20,000.

The hardware business of James Henry and Son Company at Detroit has been incorporated with a capital of \$6,000.

### New Jersey.

The Newark Hardware and Repair Company, 147 Mulberry Street, Newark, has been organized to manufacture hardware and metal specialties. David Meyers, 123 Hillside Avenue, heads the company.

### Ohio.

The Goller Hardware Company of Bryan is retiring from the hardware business.

John Kaiser has sold his interest in the Edon Hardware Company at Edon to his partner, Charles Eyster, who is now the sole owner.

The Sebring-Leonard Hardware Company of Alliance is building a large addition to their storeroom on Fifteenth Street.

Frank English sold his hardware business in South Broadway to Harry Grogham of Canton.

### Pennsylvania.

W. L. Dougherty and Son, hardware merchants at Altoona, have purchased a three story brick building at 1105 11th Avenue for their business.

Partnership heretofore existing between Louis Hoburg and Fred Hoburg, doing business under the name of L. and F. Hoburg, retail dealers in hardware, etc., at Etna, Allegheny County, was dissolved, Lewis Hoburg retiring, and his brothers, Fred and Richard, continuing the business at the same place.

### Texas.

Brown Milburn Hardware Company of Weatherford has been incorporated with a capital of \$30,000. Incorporators are John R. Brown, N. T. Tate, and F. W. Milburn.

### Wisconsin.

Ed Koop has purchased an interest in the hardware business of J. A. Held at Gillett. The new name is the Held Hardware Company.



# Selling Automotive Accessories

*How Hardware Dealers Can Increase Their Profits by Handling Standardized Automotive Accessories. Facts and Suggestions to Aid Them in Giving Better Service.*

## REPLENISH OIL FREQUENTLY.

The car owner who changes the oil in his crank case for himself knows that he finds a quantity of water in it each time.

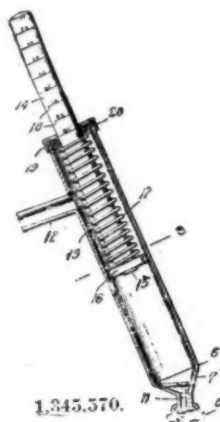
This is a very good reason to make the frequent changing of the oil a habit.

The water and the oil mixes to form an emulsion that is far from being a lubricant for the car and burned and scored bearings are the result of carelessness in this direction.

For the best results, the oil should be changed every 500 to 700 miles.

## Secures Patent for Tire Pressure Gage.

Earl D. White, of Delta, Colorado, has obtained United States patent rights, under number 1,345,570, for a tire pressure gage described herewith:



In a device of the class described, a hollow cylindrical body having a contracted inclined tubular extension, a spring pressed pressure indicator slidably mounted in said body, said indicator comprising a stem and piston, a check valve in said piston, means for connecting said body with a pump at a point above the normal downward limit of movement of said piston and means for connecting the tubular extension to a tire nipple.

## Prevents Nuts from Dropping Into Flywheel Case.

A great deal of care must be taken when tightening the rear connecting rod bearing on a Ford engine, to prevent dropping one of the bearing nuts down into the flywheel case. Even with this precaution a nut is occasionally dropped.

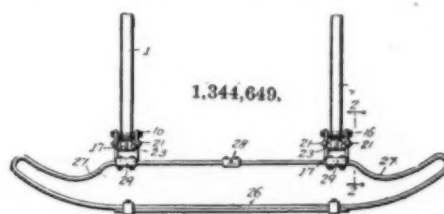
A very good method of preventing this is to block the passage in the crankcase with a pad made of cotton waste wrapped in burlap. After the work is completed, it is a simple matter to remove the pad from its place.

## Patents Bumper Attachment

William G. Pancoast and William J. Grotenhuis, Chicago, Illinois, assignors to Biflex Products Company, Waukegan, Illinois, a Corporation of Illinois, has secured United States patent rights, under num-

ber 1,344,649, for a bumper attachment described as follows:

In a bumper attachment, the combination of a pair of corresponding bracket members adapted to be clamped on the opposite sides of a vehicle sill and



each having an inturned flange at the outer end thereof, a bumper, and means for detachably securing the bumper to said flanges of the bracket members.

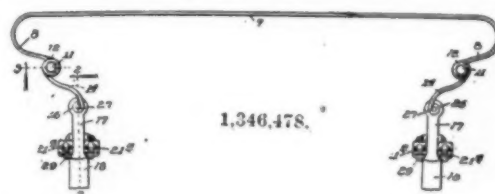
## Pass This to Your Customers.

A little graphite and oil mixed to the consistency of a paste and used on all threaded surfaces will allow the bolt to be made up tighter and always allow it to be removed. It is better than white or red lead in making a gas or water-tight fit and does not set.

## Secures Patent Rights for Automobile Bumper.

Under number 1,346,478, United States patent rights have been granted to Leroy Baumgartl, Chicago, Illinois, for an automobile bumper described as follows:

In combination with an automobile, a bumper



formed of a cross-bar, arms pivotally supported on the automobile in spaced relation and pivotally connected at their outer ends with the ends of said cross-bar, and spring means operatively engaging said arms and exerting a yielding force thereon tending to swing them at their outer ends toward the center of the automobile.

## Is Chartered to Make Accessories.

With a capital stock of \$10,000, the Superior Auto Signal Company, Superior, Wisconsin, has been chartered to manufacture automobile accessories by H. M. Mark and others.

Nature has good intentions but cannot carry them out.—Aristotle.

# Advertising Help and Comment

*Send Us Copies of Your Advertisements. Let Us Help You Get Bigger Results by Advice and Suggestions. The Service Is Free. Don't Hesitate to Take Advantage of It.*

Herewith are shown the upper and lower portions of a page-long advertisement of the Kinney and Levan Company, which appeared in the *Cleveland Plain Dealer*, Cleveland, Ohio. It has fourteen specials for Saturday's selling. Much praise is due the Kinney and Levan Company for the uncommon ex-

are neat and helpful. The advertisement is artistic as well as practical—a most desirable combination.

\* \* \*

## Sound Advertising Helps Honest Business.

The truth-in-advertising work of the Associated Advertising Clubs is designed to help, not to hurt, honest business, declared H. J. Kenner, secretary of the National Vigilance Committee, addressing the session of advertising agencies at the recent convention of the Associated Advertising Clubs of the World in Indianapolis, Indiana.

"Practical: Definite: Helpful: As far as words can describe action," he said, "these three tell the story of a service which has been aggressive and fearless, while constructive and cooperative. It has been so because no other would meet your exacting demands for disinterested, result-getting protection of Public Confidence—the fact—or on which all advertising depends for permanent success.

"Any degree of adulteration in the honesty of advertising is unwholesome. The attitude of mind of those few advertising agents who say, 'We believe the things we state to be true—our claims are our opinions and as long as nobody can wholly disprove them, we will use them'—is grounded in false philosophy. By such unsound reasoning no limit would be placed upon the fabrications of a fertile imagination.

"Truth workers are not seekers after shreds of power which consist of the giving of advice, in the finding of fault, and in setting some gross offender by the ears. They take their obligation seriously and deal with error only as the starting point of constructive action, confident that the advertising world wants to find facts and face them wherever doubt and suspicion lurk.

"Suspicious bred by misstatements in dealer copy react against national advertising. Doubts created by national advertising undermine faith in local paid publicity. Common interest and common sense dictate that local and national business cooperate closely to make protection of confidence national in the broadest sense.

"Much unfair trading on nationally advertised trade-names is eliminated and prevented by the co-operation of local Truth forces. B. V. D., Congoleum, Linoleum, Victrola and names for which public esteem has been created have been given important and valuable protection, in many cases of a kind which the owners of such trade-marks could not obtain except at great pains and expense."

\* \* \*

Slander is a certain boomerang.





## 14 Specials

### For Saturday Selling

**Stainless Knives**  
Sharp steel blades, Universal quality, ivory handles; these are offered at a special price, in sets of six, for **\$5.00**  
*Silver Dept.*

**Stainless Sets**  
Two pieces, stag handle, sterling silver ferrule, Universal steel blades; three styles; values up to \$6.50. Special **\$5.00**  
*Silver Dept.*

**Milk Covered Boxes and Bowls**  
Silk and Brocade Covered Bon Bon Boxes, Bowls, Picture Frames, Trays, Powder Bowls and other pieces; some are covered with gold lace and trimmed with heavy gold braid and dainty silk flowers. The colors are blue, rose and gold. All are marked to close at 1/2 off. **Favor and Gift Section**

**Earthenware Mixing Bowls**  
White earthenware with blue band decoration; set of 3, 5-inch, 7-inch and 9-inch **90c**  
*China Dept.*

**Serving Trays**  
A regular value **\$2.25**  
*Housefurnishing Dept.*

**Combination Shower Bath Spray**  
A regular shower bath spray, with massage and shampoo brush all in one. Easily attached to any faucet. A regular \$2.00 value, for **\$1.65**  
*Housefurnishing Dept.*

**Porcelain Cups and Saucers, White and Gold**  
Thin imported china, with gold band and line decoration, half mat gold handles. Dozen **\$9.00**  
*China Dept.*

**House Brooms**  
Good quality broom straw, well made, medium weight, smooth handle. A regular \$1.25 value for **85c**  
*Housefurnishing Dept.*

**The Kinney & Levan Co.**  
**Euclid Ave. at East 14th St.**

cellence of the verbal descriptions as well as arrangement of the articles in the layout. Evidently, care has been taken to avoid a fault quite common in hardware advertisements, namely, too great an amount of black face type. There is just enough display type used in the advertisement to serve the purpose of classifying the specials advertised. The illustrations



# Warm Air Heating and Ventilating

*Better Installations. How to Sell More Warm Air Heaters.  
Reports of Progress in Warm Air Heater Research Work.  
Ventilating Factories, Garages, Theaters, and Houses.*

## STEALS MARCH ON MICHIGAN AUXILIARY SALESMEN.

Armed with improvised weapons of their craft, a posse consisting of members of the Salesmen Auxiliary to the Michigan Sheet Metal Contractors' Association made an exhaustive search of the highways and byways



Poses of Members of Salesmen's Auxiliary, Consisting of  
Thomas I. Peacock, C. F. Nason, H. E. Doherty, R. W.  
Blanchard, E. E. Behler and N. L. Pierson, Jr.

of Grand Rapids, Michigan, Wednesday evening, August 4, 1920, in quest of E. S. (Dick) Moncrief, Vice-President, Henry Foundry and Furnace Company, Cleveland, Ohio.

The posse was partly hatless and wholly breathless when the official photographer of AMERICAN ARTISAN AND HARDWARE RECORD took a flashlight picture of them at the end of their fruitless hunt for their victim.

They had just barely ceased gnashing their teeth and were beginning to conserve their energy for the purpose of devising a sinister plot for the enmeshment of the fugitive.

Although no written law of Michigan or any other state had been violated nor any bodily damage done to the members of the posse, they refused to forego their revenge or to allow their disappointment to be assuaged.

"Dick" Moncrief is mild and gentle. He has more friends than the sporting editor of a daily paper and more admirers than Babe Ruth.

His life is an open book. He wouldn't harm a mosquito.

He is scrupulous in his observance of every statute of the land to the last comma and semi-colon.

He earned every penny that he has in the bank. He never falls behind in his dues to any lodge or subscription to any trade paper. In a word, he is a paragon of all the virtues.

Why then should such a fierce-looking band as the posse, shown in the accompanying group photograph, have started so relentlessly on his trail?

The answer to the question does credit to "Dick"

Moncrief or at least, shows that his heart is in the right place and his intentions are of the best.

Naturally, being so deeply in love, he was solicitous for the peace and comfort of his bride-to-be, and, therefore, did not notify the members of the Salesmen's Auxiliary to the Michigan Sheet Metal Contractors' Association that he was about to be married in Grand Rapids to a very charming lady of that city.

It is no reflection upon the members of the Salesmen's Auxiliary to say that "Dick" Moncrief knew what kind of charivari they would give him and his bride if they had a chance to be present at the wedding.

Sheet metal products, and the parts of warm air heaters, such as sections of radiators and parts of grates, pieces of furnace pipe and elbows, when vigorously drummed upon by the strong-armed members of the Salesmen's Auxiliary would not only frighten the bride but might also have given her the impression that her husband associated with professional noise-makers.

Of course, "Dick" Moncrief could easily have convinced her that the occasion was rare and the salesmen



E. S. (Dick) Moncrief.

normally mild-mannered and capable of walking through the most complicated parlor without knocking any of the vases off the piano or center table.

But that would take up much valuable time that could be more joyously employed.

Therefore, he chose a wise course when he was quietly married to Lila A. Valance at the parsonage of Dr. William Forbes Emory on Clancy Street, Northeast, Grand Rapids.

They were attended by Mr. and Mrs. S. Barber of Saranac, Miss Edith Gerbers and Harold Hoogerhyde of that city.

Following the ceremony, a dinner was enjoyed at the Hotel Pantlind, after which Mr. and Mrs. Moncrief left for their honeymoon in New York City, Washington, D. C., and the Thousand Islands. They will be at home after September first at 1501 West Clifton Boulevard, Lakewood, Cleveland.

If the newly wedded couple are one-tenth as happy as the combined wishes of their friends would have them, the rest of their lives will be filled with joy and gladness.

### **Ventilation Is Big Field for the Contractor.**

Industrial Commissions in every state are becoming more insistent upon sanitary conditions in factories and foundries, and justly so. The stagnant air, gas fumes and smoke are actual menace to the lives of the workers, and during the present state of "unrest," employes are unusually backward, in accepting work where conditions are not the best, both with regard to light and ventilation.

In so far as ventilation is concerned, it is always to the employer's interest to have his place of business ventilated, because workmen can think more clearly, accomplish more and have greater endurance when they have plenty of fresh air to breathe.

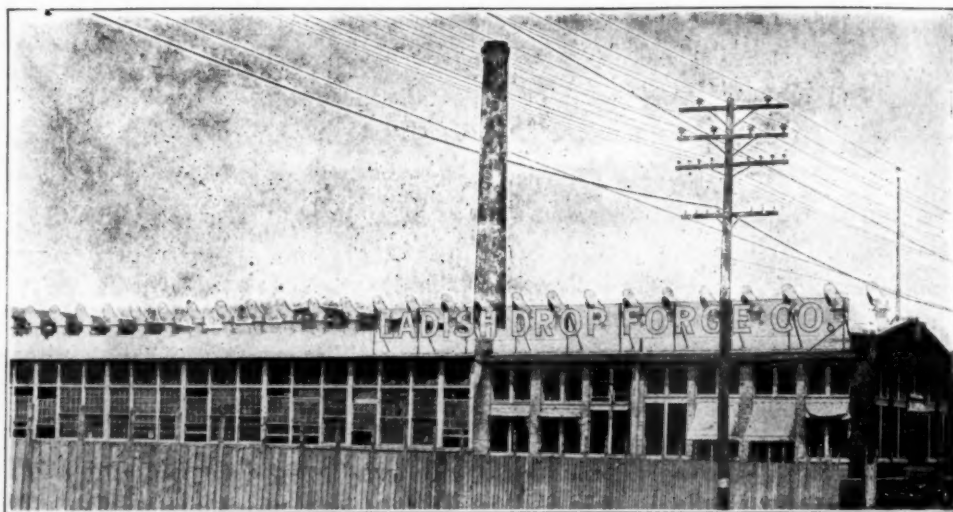
But there are hundreds of factories and foundries today that are handicapped by almost unbearable conditions. These conditions could be instantly improved by proper ventilation, and here is where the contractor's opportunity comes in. On new buildings the contracting engineers may possibly do the installing themselves, although it is really a metal worker's job. On old buildings, however, the metal worker should solicit the work himself from the owner of the factory or foundry.

The building illustrated is a new one, owned by the Ladish Drop Forge Company, Milwaukee, Wisconsin, and ventilators were installed at the outset. The Secretary of the Company, Mr. Coughlin, said it was no longer hard to "keep men on the job," because the smoke and gas fumes were quickly carried away. In their old building, where their heat treating furnaces had previously been located, the smoke and gas fumes hung low in the building and made work difficult and hazardous.

Go through your local directory and make a note of the factories, foundries, round houses, churches, theaters, etc., and find out if they are ventilated. If not, make them an estimate on the necessary roof ventilators, installed. The manufacturers of ventilators will be glad to assist you in any way possible. If you give dimensions and a description of the building to be ventilated, their ventilating engineers can advise as to number of ventilators necessary, whether fans or special flues for carrying off the foul air and smoke would be needed.

The ventilators shown are the "Alpina" Siphon Revolving Ventilators, made by the Milwaukee Corrugating Company, Milwaukee, Wisconsin. They were installed by Klug and Schmidt, the engineers who planned and constructed the building. The building was inspected by the State Industrial Commission and conditions as to ventilation met with their unqualified approval.

The "Alpina" Ventilator is simple in construction, very strong and revolves easily and noiselessly on brass ball bearings. The "Alpina" Ventilator is patented and a gold medal was awarded the manufac-



Foundry of the Ladish Drop Forge Company, Cudahy, Wisconsin, Showing "Alpina" Ventilators on Heat Treating Furnace Building.

turers at the Panama Pacific Exposition at San Francisco in 1915.

### **Outlines Fire Hazards of Heating Systems.**

Some instructive details are given regarding the fire hazards of heating systems by *Insurance Engineering*, as follows:

The surveyor or inspector finds his attention called to problems ranging from the old-fashioned open fire-place, with wood for fuel, such as grace and make cheerful our country homes, to the wood or coal burning stove, and up to the more modern and complicated steam, hot water and warm air heaters, now so common in the equipment of city and town houses, with a sprinkling of natural gas grates or stoves, and an occasional encounter with the kerosene oil device, each demanding special expert knowledge as to construction and use, and the exercise of good judgment in the suggestions necessary to make safe such defects as may be discovered upon investigation.



Considering the record of fires from heating apparatus, the only conclusion to be reached is that carelessness is at the base of each of these accidents, either as a defect in the original installation of the apparatus, or as a result of recklessness and the neglect in its after use and care.

With a desire to consider briefly some of the salient points of hazard incident to the methods of house warming, we take up the different devices in the sequence of the statistical record as above noted.

The furnace should be set upon a very solid foundation in order to prevent the sagging or cracking of its walls.

The top or dome of the enveloping walls should not be less than 18 inches from the unprotected woodwork or lath and plaster ceilings, and its smokepipe or flue should be a like distance from combustibles.

The ashpit should be sunken, or the floor in front of it be of brick, stone or concrete, not less than 36 inches wide.

The enclosing walls of the furnace should not be less than 12 inches from all combustible material, and the inlet or cold air duct should be entirely of iron or other metal.

Hot air flues or conduits should be made of heavy, bright tin plates with well soldered lock seams, and be kept at least 10 inches from all woodwork or other combustibles.

Where it is necessary to carry them through or into wooden or lath and plaster partitions the flues should be doubled—that is, one inside the other, with an air space of not less than  $\frac{1}{2}$  inch between the two, and be properly braced to insure rigid separation throughout.

Where register boxes are set in floors or partitions, the woodwork should be framed around them to leave an air space of not less than  $2\frac{1}{2}$  inches, and be protected by flashings of bright tin extending from the outer edge of the register opening to and through the floor beams or partition.

Each register should be set in a frame of slate or soapstone not less than  $2\frac{1}{2}$  inches wide and an inch thick, firmly and well set in cement or plaster of paris.

At least one of the registers of the system should be so arranged as to insure its being constantly open, either by the removal of the vanes of the valve or by wiring the same open, so that closing would be impossible.

Heater firepots should be carefully examined before use each season, to discover and remedy defects due to the burning out of their walls or the destruction of the luting at the joints of the same, whereby coals might fall into the surrounding air space and ignite dust or other combustibles which are liable to accumulate therein.

### **Rock Island Register Company Moves to New Location.**

The office and factory of the Rock Island Register Company, are now located in a new building at 2435 Fifth Avenue, Rock Island, Illinois. The new plant gives the company approximately three times the floor area which it previously had.

The structure is modern in every respect and affords ample facility for taking care of the increasing manufacturing business of the Rock Island Register Company. Also it gives plenty of space for carrying larger stock to take care of the company's jobbing business.

### ***Suggests a Way to Prolong the Life of Warm Air Heaters.***

TO AMERICAN ARTISAN AND HARDWARE RECORD:

May I suggest to furnace manufacturers a simple change in construction that will add to the life of a furnace.

When a fire pot burns out, furnace men find in about nine cases out of ten that the hole appears in that part between the top of the ash pit arch and the lower plate to the firing door chute.

The evident reason for this is that in this space there is practically no circulation of air, which prevents overheating, or unequal heating.

To prevent overheating in this area I would have holes of sufficient capacity cast in the front frame, between the ash pit and fire door.

If no front frame is used, then a special cast iron ventilating plate should be added to the casing.

The reason why this should be done in the casting is that the user of a furnace would be sceptical if they were cut into the casing by a furnace installer.

To allow the air to strike the pot as freely as possible, the preferred position of the dust pipe would be near the outer edge of the fire door.

Believing that anything that prolongs the life of a furnace is a help to the furnace business, I submit the above for your consideration.

Yours very truly,

A. E. DETWILER.

### ***Joins the Manny Heating Supply Company.***

The sales force of the Manny Heating Supply Company, Chicago, Illinois, has been appreciably strengthened by the addition of Wesley J. Johnson, formerly manager Furnace Department Summit Stove Works, Morrison, Illinois.

Mr. Johnson has been selling warm air heaters for the past fifteen years and is widely and favorably known to the trade. He will represent the Manny Heating Supply Company in Northern Illinois and lower Wisconsin.

### ***Build Your Trade on Service.***

You can't build your business wholly on the grounds of stern necessity, the real need the people of your community have for your goods. Competition is too strong for that and people are too much in need of variety and entertainment. People might, you know, get along without your shop.

"When anyone has offended me, I try to raise my soul so high that the offence cannot reach it."—Descartes.

# Practical Helps for Tinsmiths

*No Two Jobs Are Exactly Alike. Therefore, the Sheet Metal Worker Has to Meet Each Difficulty as It Comes. Send Your Problems to Us. Let Our Experts Help You.*

## PATTERNS FOR QUADRUPED ON SPHERE.

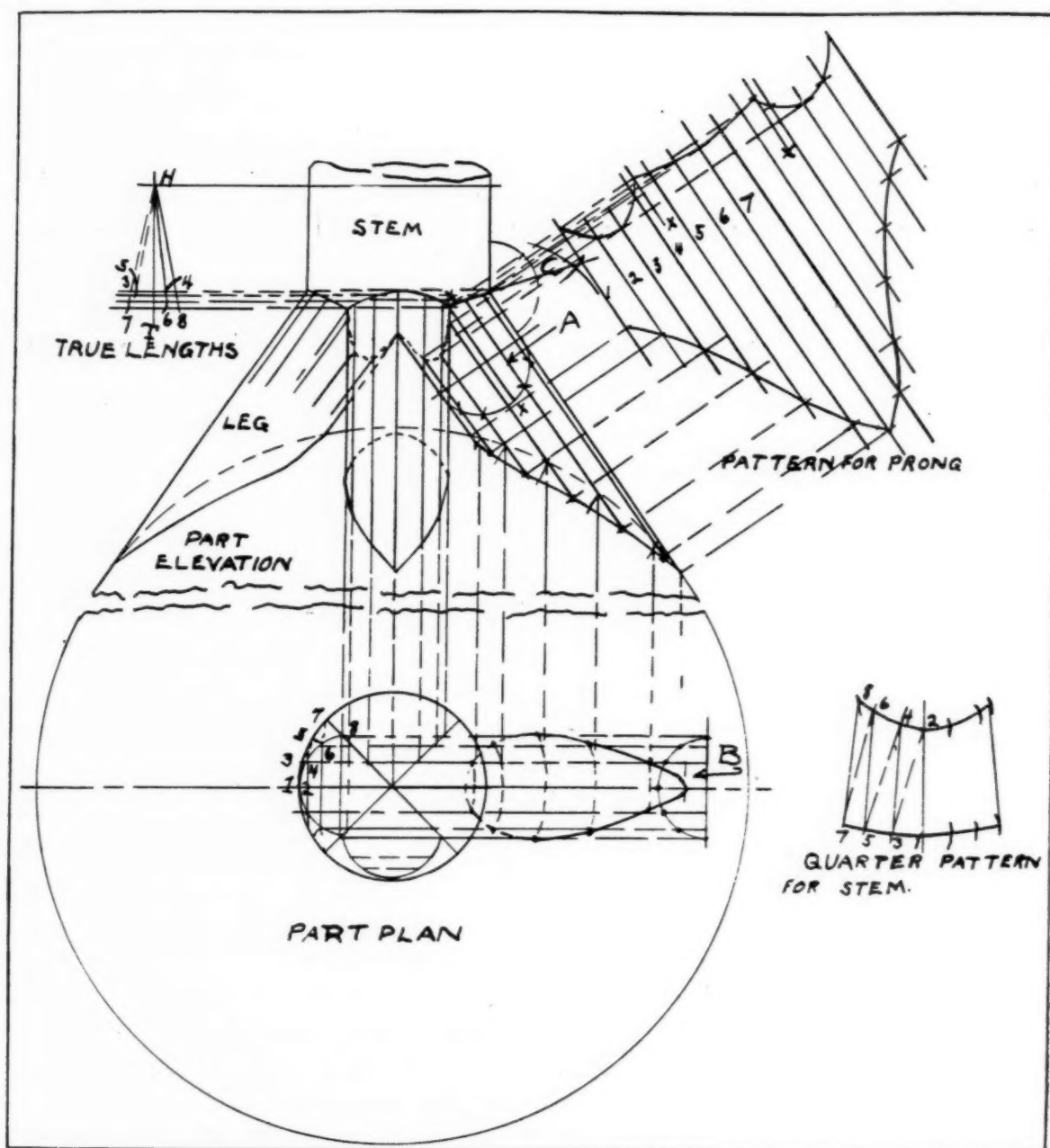
By O. W. Kothe, Principal St. Louis Technical Institute and Instructor in the David Rankin, Jr., School of Mechanical Trades, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

Workmen often wish to make ornaments and this takes on a multitude of shapes. Here we have four

to direction of leg, and then develop a part plan.

As this fitting has four legs, we draw a section B and draw lines parallel to the center. From each point where the lines of section A cross the circle of elevation, drop lines to the center line of plan.

Then with dividers set to the center, and each of these points as radius, strike the arcs to intersect similar lines drawn from B. This gives the view of open-



Patterns for Quadruped on Sphere.

legs leading from a stem and resting on a sphere. The miters involved are very interesting.

At first we draw the outline of sphere and then project the leg with section A to suit the rise and angle desired. Draw lines through section A parallel

ing in sphere.

Now by squaring out lines from intersections in circle of elevation, and then erect lines from the heavy dots in plan, we establish an approximate miter line of elevation.



This method is approximately accurate and much quicker than if the strict geometrical construction were used.

To develop the miters around the stem a part plan must be used as shown in the small circle for stem. The miter X-C is bisected and the throat portion is projected from the miter of plan.

Observe the throat miter intersects the side in point x, and this x must be projected into half section A.

To set out the pattern pick the girth from A and set as 1-2-3-4-5-6-7 etc. Draw stretchout lines and then project points into those lines of similar number. Watch points and lines carefully and see that x is in its correct position. This gives the pattern as shown.

To develop the stem a part plan must be developed as shown. This gives the flare as it changes from a perfect cylinder to the four prongs. The lines as 1-2, 2-3, 3-4 etc. are set off in diagram of true lengths. The height H-T can be made at pleasure.

To set out the pattern, use the true lengths of diagram, the girth from 1-3-5-7 of plan, and the spaces between x-x of pattern for prong. Only a quarter pattern is required to layout. Laps for seaming or riveting must be allowed extra.

### **Plans Collective Bargaining in Buying Insurance.**

That the Master Sheet Metal Contractors' Association of Wisconsin constantly seeks new ways to serve its members is demonstrated again by its latest enterprise. This time, the Association is considering the matter of collective bargaining in the purchase of industrial and fire insurance.

The subjoined letter from Paul L. Biersach, president of the Association, has been sent to all the members:

"At our meeting last night a discussion was brought up by Brother Adolph Schumann as to the feasibility of collective bargaining not only on our Workmen's Compensation, Public Liability, Auto Trucks and automobiles, but also fire insurance, with the Mutual Companies writing these kind of policies and it was the consensus of all those present that this might accrue beneficially to all our members.

"Therefore your President has appointed a committee composed of the writer, Edward Hoffman and Adolph Schumann, to get in touch with the various companies, obtain the data and submit the same for discussion at some ensuing meeting.

"In order that your committee may be in a position to handle this entire matter intelligently, it suggests that you submit immediately the following information, thus:

"1. Number of autos and trucks (for business and private use);

"2. Liability Compensation Insurance. Number of men and approximate amount of wages, separately for shop and erection, per year;

"3. Aggregate amount of fire insurance desired.

"The committee believes that they have quite a task before them and it will take some time to get the necessary information. If you will, therefore, cooperate immediately on the information desired,

this will enable them to submit their findings for your perusal as quickly as possible.

Fraternally yours,

PAUL L. BIRSACH,  
Chairman."

Milwaukee, Wisconsin, August 10, 1920.

### **Play the Game Right.**

Life itself is aptly likened to a game, says Forbes' Magazine.

To win, to earn and enjoy the fruits of victory, you must play fair.

Wealth is not the real prize of life. It is only a trophy, a symbol and may carry with it no satisfaction; indeed, it does not carry with it genuine lasting satisfaction unless it has been won fairly, honestly, honorably.

The rules for playing the game are extremely simple. Indeed, there is only one rule: Obey your conscience.

Of late there has been a great deal of unfair playing.

There have been wholesale efforts to reap more than has been sown, to get more than has been earned, to tilt the scales unduly.

It begins to look as if some of the profiteers will live to regret having broken the rules.

Sooner or later the labor slackers will also get their just rewards.

In seeking to reach success there is only one worthwhile course to follow: Abide by the rules of the game.

The worker who will cheat for his employer will also cheat his employer.

Neither in business nor in life does cheating pay in the end.

It's better to play the game and fail to shine than to break the rules and shine momentarily.

The things that count are the things that last.

### **This Means You.**

It is easier to do a thing right than to explain why you did it wrong, says the National Cash Register News. An ounce of forethought is worth several pounds of substantial regret.

Isn't it funny that everyone thinks that the sign "This means You" was put there for the other fellow?

### **Opportunity Points the Way To Good Fortune.**

Once upon a time, Henry Ford wrote a friend asking him to invest in his automobile venture.

The letter went into the waste basket.

Had the friend invested \$100, it would have returned over \$300,000.

Ideas and experience furnish similar opportunities. The time invested in studying trade journals and attending business conventions may be made to return profits three hundred thousand times the value of the effort required.

The wind and waves are always on the side of the ablest navigators.—Gibbons.

## Here Is a Most Important Question: Are the Brains of Your Business in Your Waste Basket?

*Do You Throw Away Catalogs and Circulars Without Reading Them? If So, You Are Wasting Brains.*

Written especially for AMERICAN ARTISAN AND HARDWARE RECORD by J. C. Greenberg, Peoria, Illinois.

(Copyright by J. C. Greenberg.)

Mr. Sheet Metal Man, I just want to ask you this question, and see what you think of it: "Are the brains of your business in your waste basket?" It sounds foolish does it not? Just stop and think over it for a moment and you may change your mind.

Brains have been developed in man for the sole purpose of using them as a means of rendering the best possible service to his fellow man.

Education develops the brain and the result is intellect. The higher the intellect, the better the service-rendering power. Now then, since man is the highest developed animal, he is expected to make good in his place in the world.

You as a sheet metal man have a place in the world. This place is Sheet Metal Art. You must educate yourself so that you will become more proficient in your work. You can not be successful unless you have education in your line.

Your service-rendering power is always governed by your knowledge. You can only DO what you know, and you can do it as well as your knowledge is.

Progress is only attained through education. If you do not progress with the times you soon become a back number, and a back number is a stale condition which soon begins to rot.

You must be up to date in your knowledge, because you need the very latest method in your sales talk to your customers. Unless you *know* the last word about your business, you are dropping out of the race slowly and surely.

The only difference between the up to date sheet metal man and the back number is that one *knows* his business and the other *knew* his business. Which one do you think is most successful?

You will agree with me when I say that there is a definite knowledge necessary to your success. That knowledge is the *organized facts of your business*. You *must* have it.

Now then, where are you going to get this education which will make you a better sheet metal man, a better furnace man, and a better *salesman*?

There seems to be a hitch somewhere: still I will try to answer it. I want to say right here that you have the necessary requirements *right in your own shop*.

But wait a minute—suppose some one was to say

*I have seen hundreds of sheet metal shops where I could gather up trade journals, catalogs, letters and circulars by the hundreds—some of them months old—unopened and of course unread. Just imagine the waste of knowledge. Did any of you ever go to a wholesale house and see dozens of book shelves filled with catalogs and other advertising matter? Sure. They save this knowledge, and that is why they are wholesalers and sell you goods. They know their business.*

that they will give you a college education fitting to your trade, and a positive guarantee that you will be more successful—and that the cost of this college education is nothing but effort on your part, would you take it?

And after you took it, would you throw it in your waste basket? You say you would not throw it in the waste basket, yet thousands of sheet metal men, literally throw college educations away at the rate of one a year.

Now listen well. Did you ever throw catalogs, circulars, letters, magazines, and other advertising matter in your waste basket? Did you?

If you did, you are throwing away a college education.

Here is how it works out. Many manufacturers employ advertising men at salaries ranging from five to fifty thousand dollars per year to teach the sheet metal man all about the merits of their products.

These advertising men arrange a clear description of the article, accompanied with pictures, drawings and directions for use. The intent is to make you familiar with the latest ideas on the market.

Letters tell you good news, circulars give you information that you could not *guess* in a thousand years.

These manufacturers go farther than that. They even pay the postage so that the mail man can carry this education to your desk—and still you throw it away. O the shame of it!

Of course you will say that you do look at them, and that you like to have them—but *looking at them is nothing*. They must be studied to get the true ideas out of them.

The man who is a student of his business is the one who earns real money. Ask any big business man in your town, and he will tell you that he has to read many pieces of advertising in order to get an idea of how things are done successfully.

I have seen hundreds of sheet metal shops where I could gather up trade journals, catalogs, letters and circulars by the hundreds—some of them months old—unopened and, of course, unread.

Just imagine the waste of knowledge! Did any of you ever go to a wholesale house and see dozens of book shelves filled with catalogs and other advertising matter? Sure. They save this knowledge, and that is why they are wholesalers and sell you goods. They *know* their business.



I can personally say truthfully that if any sheet metal man would only try to read and save the advertising matter in his shop right now, he would get a college education for nothing but the effort. Try it and see.

I have often heard the old stall that there is no time to read; that they are too busy, or too tired, are too something or other which makes them unable to read. In other words, these men tell me that *they have no time to improve*. God pity the man who thinks he knows all he needs to know.

If I were a sheet metal man I would get up an hour earlier, or go to bed an hour later—but *I would learn*.

I would learn because learning to business is what food is to life. It is essential to success.

The old advice to your apprentice is, *learn more, earn more*. Do you believe in that? If you do, do you do it?

There is another avenue of knowledge that comes to you absolutely free, and that knowledge is the salesman.

You know the salesman must know his business or else he could not be a salesman. He is sent to you in the hopes that you will be glad to listen to his words of wisdom, and yet, how many times do you turn him away even before you have given yourself a chance to know what he has to say to you.

He brings the market to your door, is willing to tell you all about the thing he has to offer.

He never tells you that if you do not buy he will not talk to you, he merely wants a chance to educate you.

In spite of the fact above stated, some sheet metal men have an idea that the salesman has come to take away their money—that he is a sort of commercial robber.

The reason that so many men get stung on a purchase is that the buyer does not know how to buy, because he has not the necessary knowledge of the latest new things, their improvements and uses.

The wise business man knows what there is doing in the market, and no salesman can put it over on him. The victim is always the one who knows the least about buying, and about his own business.

There is only one remedy for failure to advance. This remedy is learning. Learning is education and education is success. The material for your education is sent to you free by the manufacturer and his salesmen. Take it or leave it, but do not blame your ill success on hard luck—"there haint no sech thing."

Remember everything that comes to the sheet metal man is of interest to the sheet metal trade.

All advertising matter contains at least one thing you do not know, and that thing is your education. It contains sheet metal brains.

If you properly use the information contained in advertising matter you profit by it. If you throw them in the waste basket—then I am right about your business brains being in the waste basket.

#### **Establishes Sheet Metal Works.**

At Newark, New Jersey, Samuel Kibbel, Paul Kalin, and Adolph Wasserder have organized the

Keystone Sheet Metal Works with a capital of \$10,000. The new firm starts in business with adequate knowledge of the trade and of commercial practices.

#### **Publishes a Highly Valuable Book on Pattern Cutting.**

Any sheet metal worker of average intelligence can become a master of his craft by studying such clear and instructive textbooks as *The Universal Sheet Metal Pattern Cutter* by William Neubecker, which has just been published.

In this large volume, size 8½x11 inches, containing 384 pages arranged in double columns and illustrated by means of 681 original engravings, are to be found

practical and shortened methods of developing the patterns for general sheet metal work; heating; ventilation; blower and exhaust pipe connections and fittings; marine sheet metal work; automobile sheet metal work; short rules in pattern drafting; heavy gauge sheet metal work; machinery and belt guards, etc.

The first part of the book is devoted to a treatise on the useful and necessary instruments for the sheet metal draftsman, with points for guidance in selecting and using drawing instruments.

The second part contains an illustrated dictionary and treatise for the pattern draftsman, defining technical names and terms used in sheet metal work and giving illustrated solutions.

Plane and solid geometry are clearly explained in the third part of the book. The exercises in laying off and constructing figures provide the student with just the grounding he requires for rapid progress.

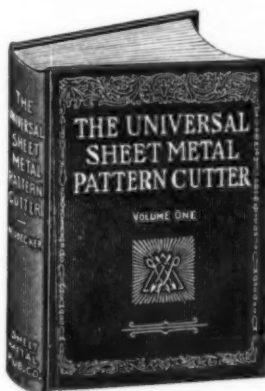
Intersection of solids and the development of surfaces constitutes the fourth part of the volume. It is divided into three parts, namely, parallel line developments; radial line developments applied to regular tapering forms; and triangulation applied to irregular forms.

The fifth part of the textbook deals with problems peculiar to the sheet metal worker of ships and boats for the benefit of marine operatives.

Automobile sheet metal work, such as hoods, fenders, fan housings, guards, etc., is thoroughly explained in the sixth part.

The remaining five parts of the book deal with short rules in pattern drafting; developing heavy gauge sheet metal work; construction of machinery guards, belt guards, etc.; laying out full size patterns by means of reduced drawings; and mensuration for sheet metal workers.

Taking into consideration the physical bigness of the book as well as the uncommon value of the information and instruction which it contains, the price at which it is sold, namely, \$7.50, represents the highest value which that amount of money can purchase in any part of the country today. *The Universal*



*Sheet Metal Pattern Cutter* can be had from the Book Department of AMERICAN ARTISAN AND HARDWARE RECORD postpaid upon receipt of the price.

### **Tells How to Be Lucky.**

First everybody won't be lucky—but if you want to be luckier than the other fellow, just work harder than he does.

Take a little more interest in your job than he does in his. Start to work a half hour earlier than he does. Work a half hour longer than he does.

Concentrate your thoughts on your work all the time more enthusiastically than he does.

Keep it up day in and day out, and finally you will be luckier than he is.

Do you want to be lucky under those conditions? If you do, you can count on it, you are lucky now and everything you put your hand to will be likely to be lucky for you.

It takes hard work to be lucky but it is worth all its costs.

### **Government Issues Figures On Zinc Production.**

Figures compiled by C. E. Siebenthal, of the United States Geological Survey, Department of the Interior, from reports submitted by all zinc smelters which operated during the first six months of 1920 show that the production of zinc from domestic ore in that period was 251,065 short tons, and from foreign ore 7,043 tons, a total production of 258,108 tons, as compared with 210,241 tons in the last half of 1919 and 255,502 tons in the first half. The stock of zinc held at smelters June 30 was 29,892 tons, having decreased from 36,793 tons at the end of 1919, and 59,651 tons at the middle of that year.

From the foregoing figures, and from the statistics of imports and exports as recorded by the Bureau of Foreign and Domestic Commerce, it is calculated that the apparent consumption for the period was 175,268 tons, as compared with 164,463 tons in the last half of 1919 and 159,501 tons in the first half.

In addition to the zinc produced from ore, 12,474 tons was redistilled from zinc ashes, skimmings, and drosses. Much of this zinc was of grades above prime western, and the total, added to the primary output, gives 270,582 tons consisting of 41,177 tons of "high grade," 17,310 tons of "intermediate" grade, 37,917 tons of "select and brass special" grade, and 174,178 tons of "prime western." Electrolytic zinc amounted to 24,035 tons, as compared with 3,845 tons in the last half of 1919, and with 23,211 tons in the first half.

The total number of retorts at plants at which there were some operations during the first half of 1920 is 157,456 as compared with 157,004 at the end of 1919 and with a maximum total of 224,778 on June 30, 1917. The number of retorts in operation on June 30, 1920, was 95,000 as compared with 107,500 at the end of 1919 and 82,000 on June 30, 1919.

English zinc smelting is greatly curtailed by high operating charges, and Continental smelters are han-

dicapped by heavy fuel costs. Belgium alone is steadily increasing operations, the output of zinc in the first half of 1920 being apparently about 40,000 short tons. At the rate of increase which has been maintained since the beginning of the year, the output at the end of the year should be in excess of 14,000 tons a month or at the rate of about 170,000 tons a year, approximately 80 per cent of the pre-war capacity.

The price of prime western zinc at St. Louis at the beginning of the year was 9.05 cents a pound, but it rose to 9.37½ cents by the 9th of January and then by a long decline, broken by several slight recoveries, reached 7.35 cents June 18th, rising to 7.6 cents at the close of the half-year. The average for the period was 8.36 cents a pound as compared with 7 cents for the year 1919.

## **NOTES AND QUERIES.**

### **Information Bureau for Our Subscribers.**

#### **Sheet Copper.**

From a Subscriber:

Will you kindly tell us who manufactures sheet copper?

Ans.—Merchant and Evans Company, 347 North Sheldon Street, Chicago, Illinois, and Philadelphia, Pennsylvania; C. G. Hussey and Company, 224 North Jefferson Street, Chicago, Illinois, and Pittsburgh, Pennsylvania.

#### **Copper Gutter.**

From John J. Beard, 559 West Main Street, Lexington, Kentucky:

Please tell us who makes copper gutter.

Ans.—Merchant and Evans Company, 347 North Sheldon Street, Chicago, Illinois, and Philadelphia, Pennsylvania; C. G. Hussey and Company, 224 North Jefferson Street, Chicago, Illinois, and Pittsburgh, Pennsylvania.

#### **To Clean Waste Solder.**

From a Subscriber:

Kindly advise how to clean waste solder made from old metals.

Ans.—First melt it all and then scrape off the dross which will naturally rise to the top. Then add a small proportion of sulphur, say half an ounce to one hundred pounds of mass. When this is completed, an analysis should be made to determine how much of each metal there is; tin, lead and zinc. The amount of zinc, provided it is small, should be ignored, and the proportion of tin and lead be made fifty-fifty, by adding either the virgin pig tin or pig lead as the case may be.

#### **Lincoln Gas Range.**

From Wahler Brothers, 2553 North Halsted Street, Chicago, Illinois.

Can you tell us who makes the Lincoln gas range?

Ans.—Fremont Stove Company, of Fremont, Ohio.

#### **Cast Iron Damper Clips.**

From the Sterling Sheet Metal and Roofing Company, Sterling, Colorado:

Please advise who makes cast iron damper clips.

Ans.—Henry Foundry and Furnace Company, Cleveland, Ohio; Berger Brothers Company, 237 Arch Street, Philadelphia, Pennsylvania; Stover Manufacturing and Engine Company, Freeport, Illinois; Whitaker-Glessner Company, Kansas City, Missouri.

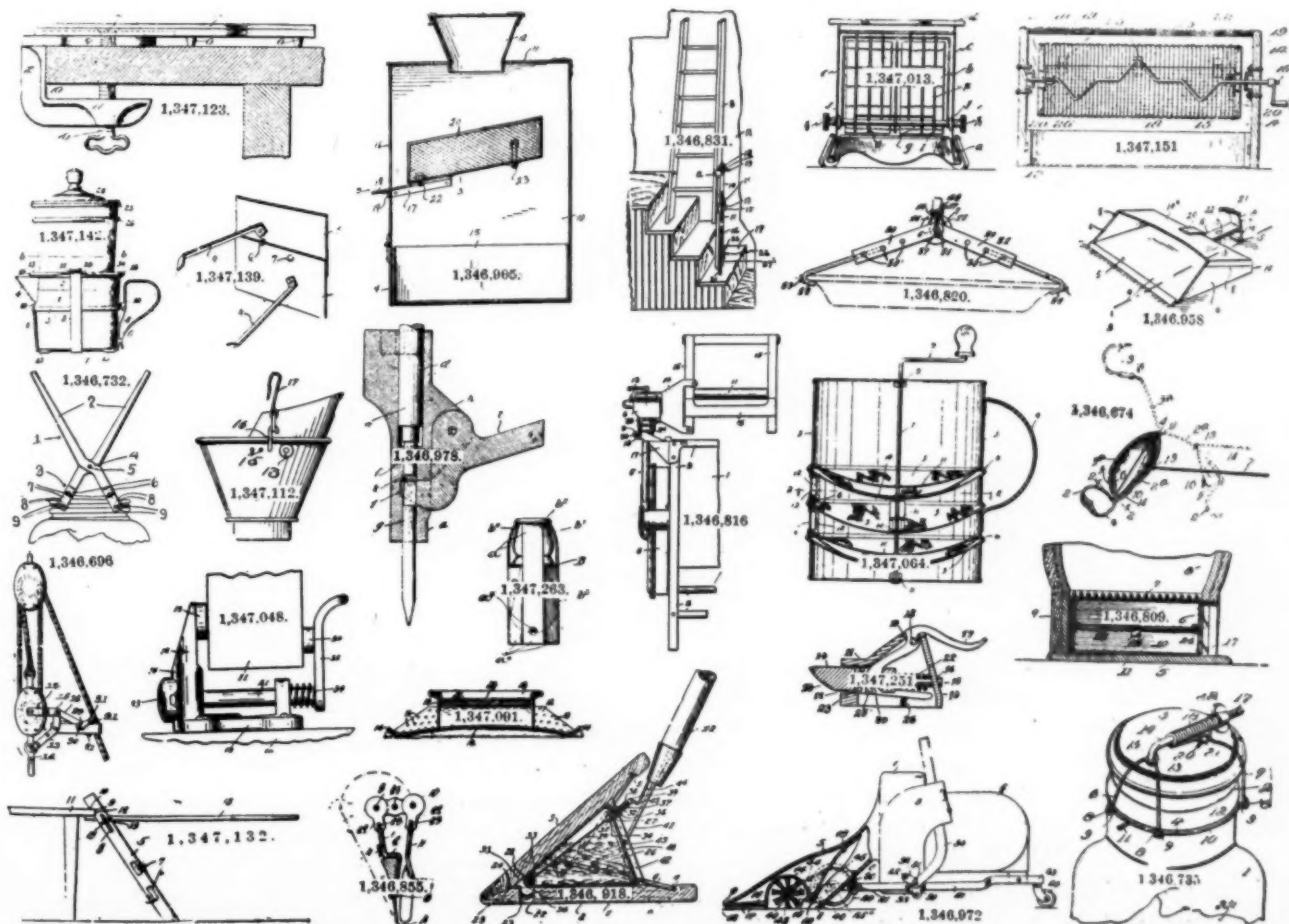


***Watch This Page. Keep Yourself Informed Concerning Improved Devices Which May Save Labor in Your Shop or Add Another Source of Income to Your Retail Store.***

1,346,972. Suction Sweeper. William V. Orr, Cleveland, Ohio. Filed Jan. 17, 1917.

1,347,151. Dustless Ash Sifter. Charlotte G. Fette, Shelton, Conn. Filed Oct. 23, 1918.

1,347,263. Shaving-Brush Case. Amos Ellis, Philadelphia, Pa. Filed Nov. 20, 1918.



# Weekly Report of the Markets

*General Conditions in the Steel Industry. Review of Prices and Tendencies in Sheet Metals, Pig Iron, etc.*

## INCREASE OF FREIGHT RATES RAISES STEEL PRICES.

Higher freight rates mean an increase in the cost of steel production. This is certain to be followed by higher prices for steel. Some notion of the increase in production costs may be obtained from the following figures:

The increase in the cost of moving iron ore from the Lakes to the Mahoning Valley, for example, will be 5 cents per ton, or \$1,000,000 per year, while the movement of limestone will add \$500,000 a year. The cost of transporting coal and coke will be increased by 40 per cent, adding several million dollars, and from \$1,000,000 to \$1,500,000 for the movement of slag and refuse will also be added to the cost of making iron and steel. Prior to this iron and steel prices have been gradually rising and during the past year some grades of iron have advanced from \$15 to \$18 per ton, \$4 of this being added within the past 60 days.

Financial difficulties in England have curtailed the buying of iron and steel from this country for British use materially during the past few weeks. On the other hand, demand for steel and iron, in which ship material figures prominently, continues to feature the export movement from this country.

Export in iron and steel for the account of other European countries has also quieted down, with the exception of plates, shapes and some bars.

During the past sixty or ninety days orders for upward of \$4,000,000 of ship plates and shapes have been placed in this country for shipment abroad. Germany was by far the heaviest buyer, placing orders for some 17,000 tons of ship steel.

Another order for 14,000 tons had been placed, and France is still in the market for 32,000 tons of ship plates, shapes and bars. New Zealand is inquiring for some six miles of pipe.

## Steel.

The steel ingot production of 30 companies which produce 85 per cent of the country's steel, for July, amounted to 2,802,818 tons, as compared with 2,980,690 tons in June and 2,508,176 in July, 1919. For the first 7 months of this year, the output totaled 20,437,252 tons, as against 17,370,856 tons for the corresponding period last year. Last month's output was divided as follows: 2,136,633 tons of open hearth, 653,888 of Bessemer and 13,297 of all other steel.

It is estimated in the iron and steel trade that the new business booked by the leading interest last month amounted to only 65 per cent of its actual production capacity.

Of course business booked does not accurately measure present demand as all business offered is by

no means being taken because the steel companies are booked beyond capacity in some lines and often unable to promise deliveries.

## Copper.

The most encouraging development in the copper situation is that there is a little better demand from domestic consumers for shipment over the next few months. This is apparent especially in the major market, and to the extent that the demand is increased, the tone of the market is improved. The outside domestic market also is a little firmer in tone.

The freight rate advance just announced probably will add about a cent a pound to the cost of consumers and producers alike. The immediate effect of this may be to hasten the time when consumers will come into the market for their last quarter's requirements.

Copper buying always goes by waves. The last wave of domestic orders in volume ended about April 1, and a new one has been slow in developing because of the strikes and transportation difficulties.

Prices are held firm by the leading producers at 19 cents for deliveries through August, September and October but no quotations are being made on any business after October.

The 19 cent price for October copper is on contracts covering September and for any business for this month alone the inclination is to quote 19.25.

The strike in the brass foundries and wire drawing mills of the Connecticut valley is practically over and it is estimated that the plants are operating at 50 per cent of capacity the full normal operations being restricted by labor shortage, men remaining on "vacation" and a scarcity of fuel.

The copper mines of the West are producing only 60 per cent of the usual output, but transportation conditions in that quarter are so much improved that the refineries here in the East are taking care of the entire output of both mines and smelters.

Although consumers still remain uncovered as to their last quarter requirements there are no signs of a buying movement in the market as yet. The outside market continues to shade the quotations of the leading producers from 25 to 50 points and is doing some business.

## Tin.

Conditions are so dull and unsatisfactory in tin at present that very little is being accomplished by offering tin down. The attitude of the American consumer at present is one of indifference unless he is actually needing the metal for consumption, but later on when he sees trade ahead he will be quite satisfied to pay a higher price if necessary.

It was undoubtedly against this expected improvement in business that London started to operate in



future tin, and undoubtedly the movement will be resumed at the first opportunity.

Pure tin, Banca and Electrolytic, is still obtainable at about 2 cents per pound under Straits, which difference is about the same as between Standard tin and Straits tin in London.

### **Lead.**

The domestic lead market is dull and weaker, but technically strong, owing to the combined influences which are keeping production below consumption. The "official" price remains at 8.50 for spot New York and 8.25 for spot St. Louis, with no metal being offered, while the outside market is gradually marking down its prices with no metal offering.

The market for lead ores remained strong at \$100 for 80 per cent lead. There were rumors of higher prices in a few cases but these were not verified.

Shipments are being hindered for lack of cars and there is a disposition on the part of the ore buyers to haul ores directly to the smelters by truck.

American pig lead has advanced in the Chicago market from \$9.70 per 100 pounds to \$9.90, and bar lead from \$10.20 per 100 pounds to \$10.40.

### **Solder.**

Prices of solder in the Chicago market are as follows: Warranted, 50-50, per 100 pounds, \$33.50; Commercial, 45-55, per 100 pounds, \$30.80; and Plumbers', per 100 pounds, \$29.50.

### **Zinc.**

Consumption of zinc continues heavy, production remains at a low level and the market is still dull and quiet. The statistical position is strong and prices average 8.10 for spot New York and 7.75 for spot, August and September deliveries.

Producers are disposed to meet the market for prompt and early shipment, but not inclined to book futures; 7.80 cents East St. Louis continues to be the ruling price for August though not freely quoted. The same price was bid for September without finding sellers, for with the approaching advance in freights it would net sellers a shade less.

The fact that the imminent advance in freight rates does not call forth more demand for prompt shipment is evidence that buyers as a rule have ample stocks for immediate needs.

Labor troubles with the producers remain so far unsettled, market prices offering no argument for any advance in wages.

It is seldom that such a quiet market does not show a yielding in price, one reason being that middlemen have very little zinc bought for early shipment that needs to be marketed, and are by no means inclined to discount the market for futures.

In the Chicago market, slab zinc has advanced from \$8.50 per 100 pounds to \$8.70.

### **Tin Plate.**

In the open market there are scarcely any offerings of tin plate for early delivery, except occasional odd lots that are held at particularly fancy prices.

As to contract business there is practically none since consumers who regularly buy on contract are

well provided with contracts, their difficulty being as to deliveries, since practically all the mills have been thrown behindhand by their light production caused by not receiving full shipments of sheet bars.

Tin mill operations are now averaging between 65 and 70 per cent, and the operations have been below capacity for so long that quite a shortage has accumulated.

### **Sheets.**

There is a moderately heavy demand in the sheet market for early deliveries, this arising not from new wants so much as from deliveries on contracts being delayed by poor mill operation, coupled with shipping difficulties.

There are scarcely any offerings in the market, as the mills that sell in a regular way are oversold for the periods for which they would accept business and the mills that endeavor to hold capacity open for prompt business are asking particularly high prices, while their offerings are limited since they also are fairly well sold up.

In the circumstances large consumers who are short on early deliveries have been making conversion contracts, quite a lot of such business having been put through in the past week.

Once the difficulties in the way are overcome the deal becomes very attractive, as its essence is that of making almost instant shipment.

Mills accept conversion deals only because they have capacity made idle by shipping conditions, through non-receipt of sheet bars from their regular sources of supply, hence if they take a conversion contract at all they want it for immediate rolling, as soon as the sheet bars can be delivered.

### **Old Metals.**

Wholesale quotations in the Chicago district which may be considered nominal are as follows: Old steel axles, \$33.50 to \$34.50; old iron axles, \$41.50 to \$42.50; steel spring, \$25.50 to \$26.00; No. 1 wrought iron, \$24.50 to \$25.00; No. 1 cast, \$35.50 to \$36.50; all net tons. Prices for non-ferrous metals are as follows, per pound: Light copper, 12 cents; light brass, 8 cents; lead, 6 cents; zinc, 4½ cents; cast aluminum, 20 cents.

### **Pig Iron.**

The increased freight rates will, of course, affect the price of pig iron—not only at points of delivery but at the furnaces, declares the report of the Matthew Addy Company, Cincinnati, Ohio. Furnace companies that get their ore, coke and raw materials from outside sources will, of course, have to pay more for all of these.

In Pennsylvania it is estimated that it will cost these furnaces at least \$2.50 per ton more to make iron than it does today, and there will be a corresponding increase among the merchant furnaces all over the country.

If there is any change at all, pig iron prices are firmer today than they were a week ago, and in certain territories there have already been advances in price.

# Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

The prices and discounts quoted on this and the following pages, are, for the most part, subject to change without notice. Owing to the unsettled condition of the markets and the shortage of materials it is practically impossible for any manufacturer to guarantee his price for any given length of time.

METALS	LEAD.	AUGERS.	BEATERS.
<b>FIG IRON.</b>	American Pig .....\$ 9 90	Boring Machine.....40@40&10%	Carpet. Per doz.
	Bar ..... 10 40	Irwin's .....25%	No. 7 Tinned Spring Wire..\$1 10
	Sheet.	Carpenter's Nut.....50%	No. 8 Spring Wire cop- pered ..... 1 50
Southern Fdy. No. 2 ..... 46 60	Full coils ....per 100 lbs. \$12 00	Hollow.	No. 9 Preston ..... 1 75
Lake Sup. Charcoal.. 57 50-60 50	Cut coils ....per 100 lbs. 12 25	Bonney's.....per doz. 30 00	Egg. Per doz.
Malleable ..... 45 50		Post Hole.	No. 50 Imp. Dover.....\$1 10
	<b>TIN.</b>	Iwan's Post Hole and Well...30%	No. 102 " " Tinned 1 35
<b>FIRST QUALITY BRIGHT TIN PLATES.</b>	Pig tin .....53c	Vaughan's, 4 to 9 in. .....per doz. \$14 60	No. 150 " " hotel.. 2 10
	Bar tin .....55c		No. 10 Heavy hotel tinned 2 10
IC 14x20.....112 sheets \$16 80	<b>HARDWARE</b>	Ship.	No. 13 " " " 3 30
IX 14x20..... 18 75		Ford's, with or without screw .....Net list	No. 15 " " " 3 60
IXX 14x20..... 20 45	<b>ADZES.</b>		No. 18 " " " 4 50
IXXX 14x20..... 21 90	Carpenters'.	Brad.	Hand 8 9 10 12
IXXXX 14x20..... 23 15	Plumbs .....Net	No. 3 Handled....per doz. \$9 65	Per doz. \$11 50 13 00 14 75 15 00
IC 20x28..... 33 60	Coopers'.	No. 1050 Handled " 1 40	Moulders'.
IX 20x28..... 37 50	Barton's .....Net	Shouldered, assorted 1 to 4, .....per gro. 4 00	12-inch .....Per doz. 20 00
IXX 20x28..... 40 90	White's .....Net	Patent asst'd, 1 to 4 " 85	
IXXX 20x28..... 43 80	Railroad.	Harness.	<b>BELLS.</b>
IXXXX 20x28..... 46 30	Plumbs .....Net	Common ..... 1 05	Call.
<b>COKE PLATES.</b>		Patent ..... 1 00	3-inch Nickeled Rotary Bell, Bronzed base...per doz. \$5 50
Cokes, 180 lbs..... 20x28 \$19 80	<b>AMMUNITION.</b>	Peg.	Cow.
Cokes, 200 lbs..... 20x28 20 00	Shells, Loaded, Peters.	Shouldered ..... 1 60	Kentucky .....30%
Cokes, 214 lbs.....IC 20x28 20 70	Loaded with Black Powder, ..... Less 18%	Patented ..... 75	Door. Per doz.
Cokes, 270 lbs.....IX 20x28 24 09	Loaded with Smokeless Powder, medium grades, ..... Less 18%	Scratch.	New Departure Automatic \$7 50
<b>BLUE ANNEALED SHEETS.</b>	Loaded with Smokeless Powder, high grade, Less 18%	No. 18, socket handled .....per doz. 2 50	Rotary.
Base .....per 100 lbs. \$7 02	Winchester.	No. 244 Goodell- Pratt, List, less.....35-40%	3 -in. Old Copper Bell... 6 00
<b>ONE PASS COLD ROLLED BLACK.</b>	Smokeless Repeater Grade, ..... Less 15%	No. 7 Stanley..... 2 25	3 -in. Old Copper Bell, fancy ..... 8 00
No. 18-20.....per 100 lbs. \$7 80	Smokeless Leader Grade ..... Less 15%		3 -in. Nickeled Steel Bell 6 00
No. 22-24.....per 100 lbs. 7 85	Black Powder..... Less 15%		3 1/2-in. Nickeled Steel Bell 6 50
No. 26.....per 100 lbs. 7 90		<b>AXES.</b>	Hand.
No. 27.....per 100 lbs. 7 95		First Quality, Single	Hand Bell polished. List plus 15%
No. 28.....per 100 lbs. 8 00		Bitted, 3 to 4 lb., per doz. 16 50	White Metal..... 15%
No. 29.....per 100 lbs. 8 10		First Quality, Double	Nickel Plated..... 5%
<b>GALVANIZED.</b>		Bitted .....per doz. 22 50	Swiss ..... 10%
No. 16.....per 100 lbs. \$9 75			Miscellaneous.
No. 18-20.....per 100 lbs. 9 90			Church and School, steel alloys .....30%
No. 22-24.....per 100 lbs. 10 05			Farm, lbs...40 50 75 100
No. 26.....per 100 lbs. 10 20			Each .....\$3 00 3 75 5 50 7 25
No. 27.....per 100 lbs. 10 35			
No. 28.....per 100 lbs. 10 50			<b>BEVELS, TEE.</b>
No. 30.....per 100 lbs. 11 00			Stanley's rosewood handle, new list .....Nets
<b>WELLSVILLE POLISHED STEEL.</b>			Stanley iron handle.....Nets
No. 18-20.....per 100 lbs. \$9 65			<b>BINDING CLOTH.</b>
No. 22-24.....per 100 lbs. 9 75			Zincd .....55%
No. 26.....per 100 lbs. 9 85			Brass .....40%
No. 27.....per 100 lbs. 9 95			Brass, plated .....60%
<b>KEYSTONE HAMMERED POLISHED STEEL.</b>			<b>BITS.</b>
Discontinued. New product will be announced later.			Auger.
<b>BAR SOLDER.</b>			Jennings Pattern.....Net
Warranted,			Ford Car.....List plus 5%
50-50 .....per 100 lbs. \$33 50			Ford's Ship..... " 5%
Commercial,			Irwin .....35%
45-55 .....per 100 lbs. 31 50			Russell Jennings.....plus 20%
Plumbers' .....per 100 lbs. 29 50			Clark's Expansive.....33 1/2%
<b>ZINC.</b>			Steer's " Small list, \$22 00..5%
In slabs .....\$8 70			" " Large " \$26 00..5%
<b>SHEET ZINC.</b>			Irwin Car .....35%
Cask lots ..... 15c			Ford's Ship Auger pattern Car.....List plus 5%
Less than cask lots.....15 1/4-15 1/2c			Center .....10%
<b>COPPER.</b>			Countersink.
Copper Sheet, mill base.....29 3/4c			No. 18 Wheeler's ..per doz. \$2 25
			No. 20 " " 3 00
			American Snailhead " 1 75
			" Rose " 2 00
			" Flat.... 1 40
			Mahe's Flat.... 1 60
			" Snail.... 1 90
			Dowel.
			Russell Jennings.....plus 20%
			Gimlet.
			Standard Double Cut Gross \$8 40
			Nail Metal Single Cut .....Gross \$4 00—\$5 00
			Reamer.
			Standard Square.....Dox. 2 50
			American Octagon... " 2 50
			Screw Driver.
			No. 1 Common..... 40
			No. 26 Stanley..... 75



<b>BLACKING, STOVE.</b> (See Polish)		<b>Well.</b> Oak, Wrought Iron Riveted Top Ears.....per doz. \$8 00		<b>Picture Chains.</b> Light Brass, 3 ft...per doz. \$1 35 Heavy Brass, 3 ft... " 1 75		<b>Saw Filers.</b> Wentworth's, No. 1, \$12.50; No. 2, \$18.25; No. 3, \$16.25.	
<b>BLADES, SAW.</b>		<b>BURRS, RIVETING.</b> Copper Burrs only...25% above list Tinner's Iron Burrs only.....30%		<b>Sash Chain.</b> (Merton's) Steel, per 100 ft. \$2 50 0..... " 2 10 2..... " 2 40 1..... " 2 60		<b>CLAWS, TACK.</b> Wood hdl. No. 10...per doz. \$0 95 Forged steel, wood hdl. " 1 75 Solid steel..... " 2 40 Giant ..... " 50	
<b>Butchers'.</b> Standard, 1/4 & 1 1/4-in....Nets Clock Spring..... " " Star ..... " "		<b>BUTTS.</b> Cast Iron.....7 1/2% Wrought Brass (New List) Plus 5% Wrought Steel, Bright.....40% Wrought Steel, Japanned..... .....Net Prices		<b>Champion Metal.</b> 0R..... 5 40 2R..... 5 60 1R..... 7 75		<b>CLEANERS.</b> Drain. Iwan's Adjustable.....25% Iwan's Stationary.....30%	
<b>Hack.</b> Atkins .....5% Star .....Nets		<b>CALIPERS.</b> Double .....Nets Inside and Outside..... " " Wing ..... " "		<b>Champion Metal.—Extra Heavy.</b> 1H..... \$ 50		<b>Pot.</b> Wire .....per doz. \$0 75	
<b>Wood.</b> Dixson Nos. .... 6 66 26 \$8 00 \$3 50 \$3 00 Atkins ..... 2 14 18 Nos. .... \$3 35 \$6 50 \$4 75		<b>CALES</b> Logger's Boot. (Lufkin R. Co.'s), per M..\$7 00		<b>Cable Sash Chains.</b> Steel.....List Net Plus 15%		<b>Side-Walk.</b> Steel.....per doz., Net prices	
<b>BLOCKS.</b> Wooden .....20% Patent .....30%		<b>CAN OPENERS.</b> See Openers.		<b>CHALK, CARPENTERS'.</b> Blue .....per gro., \$1 40 Red ..... " 1 40 White ..... " 1 25 Common White School Crayon ..... " 25c		<b>CLEAVERS.</b> Family. Beatty's, 7 8 9 10 inch..... 27 00 29 00 33 00 36 00 Per doz. \$27 00 29 00 33 00 36 00	
<b>BOARDS.</b> Steve. Wabash Crystal.....Net Prices Wabash Art Inlay.... " " Wabash Embossed.... " "		<b>CANS.</b> Milk. Elgin. Gals..... 5 8 10 Each .....\$4 00 \$5 15 \$5 15 Iowa Patterns. Gals..... 5 8 10 Each .....\$4 00 \$5 15 \$5 15		<b>CHIMNEY TOPS.</b> In bags.....per bag \$1 70		<b>CLEAVISES.</b> Malleable .....10c lb.	
<b>Wash.</b> No. 760, Banner Globe. (single) .....per doz. \$5 25 No. 652, Banner Globe. (single) .....per doz. 6 75 No. 801, Brass King per doz. 8 25 No. 860, Single—Plain Pump ..... 6 25		<b>CAN OPENERS.</b> See Openers.		<b>CHECKS, DOOR.</b> Corbin.....Net List Russwin..... 20%		<b>CLIPPERS.</b> Belt .....\$2 25& 00	
<b>BOLTS.</b> Carriage, Machine, etc. Carriage, cut thread, 1/4x6 and sizes smaller and shorter .....30% Carriage, sizes larger and longer than 1/4x6 .....20% Machine, 1/4x4 and sizes smaller and shorter.....35% Machine, sizes larger and longer than 1/4x4.....25% Stove .....50-10% Tire .....40-5%		<b>CAPS, GUN.</b> See Ammunition.		<b>CHECKS, DOOR.</b> Iwan's Volcano.....35%		<b>CLIPS.</b> Axle .....65&5%	
<b>Mortise, Door.</b> Gem, iron.....5% Gem, bronze plated..... 5%		<b>CARPET STRETCHERS.</b> See Stretchers.		<b>CHISELS.</b> Box. Inches..... 12 14 Round, per doz....\$5 25 5 75 Flat, per doz..... 7 25 8 25		<b>Damper.</b> Standard .....per doz. 70c Troy ..... " 35c Name ..... " 50c	
<b>Barrel.</b> Cast .....Nets Wrought ..... " " Wrought, bronzed ..... " "		<b>CARRIERS.</b> Hay. Diamond, Regular...each, Nets Diamond, Sling..... " "		<b>Cold.</b> Good quality, 1/2 in. and larger .....Nets Smaller size, per doz.....Nets		<b>Emery.</b> Star .....New Prices B. & A..... " "	
<b>Flush.</b> Wrought ..... " "		<b>CARTRIDGES.</b> See Ammunition.		<b>Socket, Firmer.</b> Ohio.....Price on Application		<b>Hardware Wire—</b> Prices on Full rolls (100 ft.) application 12 Mesh, galvanized " " 14 " " " " 16 " " " " 18 " " " "	
<b>Spring.</b> Wrought ..... " " Wrought, heavy..... " "		<b>CASTERS.</b> Standard—Ball Bearing. .....50&10% Bed .....40% Common Plate. Brass Wheel.....15% Iron and porcelain wheels, new list .....50% Philadelphia Plate, new list .....50% Martin's .....40%		<b>Socket, Framing.</b> Ohio.....Price on Application		<b>Screen Wire.</b> Prices on application 12 mesh, painted, per 100 sq. ft. ....	
<b>Square.</b> Wrought ..... " "		<b>CATCHERS, GRASS.</b> No. 160S, per doz.....\$12 25 No. 165S, " ..... 14 01		<b>Tanged, Firmer.—Barton's</b> With handles.....Net list		<b>COLLARS, STOVE PIPE.</b> Lacquered. Inches 5 6 7 Fancy pattern, per doz.... 80c 35c \$1 15	
<b>Angular.</b> Miller's Falls....per doz. \$23 00 Bill borers, No. 51 " 34 00 " 52 " 39 50		<b>CEMENT, FURNACE.</b> American Seal, 5 lb. cans, net \$0 45 " " 10 lb. cans, " 90 " " 25 lb. cans, " 1 87 Pecora, 5 lb. cans..... 45 " 10 lb. cans..... 90 " 25 lb. cans..... 1 87		<b>Choppers, See Cutters, Meat.</b>		<b>COMPASSES.</b> Carpenters' .....15%	
<b>Bung.</b> Enterprise Mfg. Co.'s No. 1...10% " No. 2...10%		<b>CHAIN AND CHAINS.</b> Breast Chains. With Slide..... 5 00 Without Slide.... " 4 60 Doubleslack .....doz. pairs, \$8 50 With Covert Snaps " 5 80		<b>Goodell's, for Goodell's Screw</b> Drivers .....List less 35-40% Yankee, for Yankee Screw Drivers ..... \$5 00		<b>COPPER—See Metals.</b> COPPERS—Soldering. Pointed Roofing. lb. and heavier.....per lb. 37c 2 lb..... 35c 3 lb..... 37c 1 1/2 lb..... 40c 1 lb..... 45c	
<b>Mail, No.... 2 4 10</b> Per doz....\$18 00 23 00 29 00		<b>CLAMPS.</b> Adjustable. Martin's .....30% No. 63, Screw.....20%		<b>Anti-Bent Weed.</b> Gal..... 5 7 10 Each .....\$3 90 4 60 4 85 Bello, Barrel .....65&7 1/2% Common Dash. Gal..... 5 7 Per doz. .... 17 00 19 00		<b>CORD.</b> Picture. White Wire.....60&5%	
<b>Mitre.</b> Stanley's.....Net Prices Stearns, No. 2...per doz. \$48 00		<b>CARPETERS.</b> See Carpeters.		<b>Cabinet.</b> Screw .....20%		<b>CORKSCREWS.</b> Walker's .....30% Williamson's Regular.....35&11% Williamson's Forged Worm.....40%	
<b>BRACES.</b> Fray's Genuine Spofford's .....20&10% Fray's No. 88 .....\$7 50 " No. 610 ..... 8 00		<b>CLAY.</b> See Clay.		<b>Carpenters'.</b> Steel Bar...List price plus 25%		<b>COTTERS, SPRING.</b> All sizes.....87 1/2%	
<b>BRACKETS.</b> Hay Rack. Wenzelmann's No. 1, per doz. sets.....\$18 00 Wenzelmann's No. 2, per doz. sets..... 19 20		<b>CLAY.</b> See Clay.		<b>Carriage Makers'.</b> 2 1/2" .....per doz. \$7 00 5" ..... " 14 00 8" ..... " 25 00 12" ..... " 45 00		<b>COUPLINGS, MOSE.</b> Brass .....per doz. \$2 25	
<b>Wrought Steel.....40%</b>		<b>CLAY.</b> See Clay.		<b>Quilt Frame.</b> No. 30 Ball and Socket, 2 1/2" head.....per gross \$13 00 No. 50, Ball and Socket, 3 1/2" head.....per gross 14 50		<b>COVERS, WAGON.—See Tents.</b>	
		<b>CLAY.</b> See Clay.		<b>Hose.</b> Sherman's, brass, 1/2", per doz. .... 45c Double, brass, 1/2-in., per doz. .... 1 20		<b>CRADLES, GRAIN.</b> Morgan's Grapevine per doz. \$45 00	

CRAYONS—See Chalk.			ELBOWS—Conductor Pipe.			Wood Pails.			HANGERS.		
CUTTERS.			Galvanized Steel, Tin and Terne, Round Corrugated.			Frazer's, 15lb \$1.00; 25lb \$1.50 each.			Barn Door.		
Glass.			Size. Doz.			Hub Lightning, 15lb 90c; 25lb \$1.21 each.			U. S. Roller Bearing.....12½%		
Woodward.....40%			2-inch .....50%			Tin Cans.			Matchless .....12½%		
Meat.			3-inch .....50%			Frazer's			Warehouse Tandem, No. 44 .....33½%		
Enterprise—Nos. 5 10 12			4-inch .....50%			1½ lb. per doz.....\$1 75			Conductor P.		
Each.....\$2 50 \$4 25 \$3 75			5-inch .....50%			3 lb. per doz.....3 25			Iwan's Perfection.....45%		
Nos. 22 32			6-inch .....50%			GRINDSTONES.			Eave Trough.		
" .... 6 50 8 50			EMERY, TURKISH.			Inches.. 7 8 10 12			All sizes, 5" or smaller.		
Pipe.			Out of market at present time.			Per doz. 20 50 21 75 26 25 30 50			..... per gross \$3 30 Net		
Saunders', No. 1 2 3			EYES.			Loose.			All sizes, larger than		
Each .....\$1 85 2 75 6 75			Bright Wire Screw—See Woods, B. W.			Per ton.....Price on application			5"..... per gross, 5 00 "		
Slaw and Kraut.			Drifting Pick .....60, 10 & 5%			Mounted.			Garage Door.		
Per doz.			Hooks and Eyes—			Ball Bearing.. 1 2 3			Right Angle .....50&10%		
4-knife Kraut.....\$20 00-55 00			Brass, 1½" No. 60, per gross \$3 50			Each .....\$4 75 5 00 5 25			Sliding Folding .....50%		
3-knife Kraut, 8x27 in. ....13 00-18 00			Iron, 1½" No. 50, per gross 1 60			GUN WADS.			Receding .....50%		
1-knife Slaw .....2 50			FASTENERS, STORM SASH.			(See Ammunition)			Parlor Door.		
2-knife Slaw .....3 00			Shroeder's.....per doz. \$1 50			GUNS.			Acme .....per set, \$3 75		
Washer .....11 00			Sensible....." 3 00			Iver Johnson Champion Single			Ives' Improved...." 3 40		
DAMPERS, STOVE PIPE.			FILES AND RASPS.			Barrel Shot Guns...Net Prices			Lane's Standard... " 3 50		
Diamond			Delta .....30%			Double Barrel, Hammerless .."			Lane's New Model, " 3 10		
All sizes.....List plus 10%			Swiss.....List plus 25%			HAFTS, AWL.			Le Roy Noiseless.....40&10%		
DIES AND STOCKS			Utility....." net.			Brad.			Richards .....25%		
Discount.....New List			Nicholson's—			Common .....per doz. \$0 35			Advance .....40&10%		
DIGGERS			American .....5-10%			Peg.			HASPS.		
Post Hole			Arcade .....50-10-7½%			Patent, plain top.. " 80			Hinge, Wrought, ..Add 50% to list		
Eureka.....per doz. \$14 50			Black Diamond.....40-10%			Patent, leather top " 90			With Staples—See Staples.		
Iwan's Split Handle (Eureka) ..			Eagle .....50-10-7½%			Sewing.			HATCHETS.		
4-ft. Handle..per doz. 15 00			Great Western .....50-10-7½%			Common ..... " 24			Creacent .....50%		
7-ft. " ..per doz. 20 00			Kearney & Foot.....50-10-7½%			Patent ..... " 55			Cast Claw.....per doz. \$1 50@1 85		
Iwan's Perfection (Atlas) per doz. ....16 50			McClellan .....50-10-7½%			Blacksmiths, Hand, No. 0.			Cast Shingling " 1 50@1 85		
Iwan's Hercules pattern per doz. ....18 00			Nicholson brand.....40-10-5%			26 oz. ....\$1 35			Germantown .....7½%		
See also Augers—Post Hole.			J. Barton Smith.....50&2½%			Engineers', No. 1, 26 oz.... 1 35			HAY KNIVES.		
Dividers, Wing .....25%			X-F Swiss Pattern...Net List			Farriers', No. 6, 7 oz.... 1 41			See Knives.		
DOOR CHECKS—See Checks			Simonds' .....50%			Machinists', No. 1, 7 oz.... 1 06			HAY RACK BRACKETS.		
DOORS, SCREEN			Disston's .....50%			Nail.			Wenzleman's No. 1		
¾-in. 4-panel, painted Net Prices			Heller's .....60&10%			Vanadium, No. 41½, 16 oz., each .....\$2 00			..... per doz. sets, \$18 00		
1½-in. 4-panel, painted "			Clayton & Lambert's—each .....\$4 00 @ 6 00			V. & B., No. 11½, 16 oz., each .....1 60			Wenzleman's No. 2		
1½-in. 3-panel, natural pine, fancy .."			Gate City.....each, \$6 75 @ 8 50			Garden City, No. 11½, 16 oz., each .....1 35			..... per doz. sets, 19 20		
DOOR HANGERS—See Hangers			Gem .....each, \$6 75 @ 8 50			Tinner's Riveting, No. 1, 8 oz., each .....1 10			Blind.		
DRILLS			FORKS.			Shoe, Steel, No. 1, 13 oz., each .....1 00			Clark's Gravity		
Blacksmiths' Twist. (New List) .....40%			Barley.			Tack			No. 1.....per doz. sets, \$2 25		
Breast.			Steel, new list.....New Prices			Magnetic.			No. 3....." " " 5 75		
Millers Falls No. 12, each \$46 00			HAY.			No. 5, each.....\$1 00			Gate.		
" " 112, " 26 00			2-tine.....New prices			HAMMERS, HEAVY.			Clark's ..... 1 2 3		
Hand.			3- " .....New prices			Heavy Hammers and Sledges.			Hgs & Litch, dz. \$5 50 7 00 9 75		
Goodell's Automatic.			4- " .....New prices			Under 5 lbs.....50%			Hinges only " 4 75 5 50 8 00		
Nos. 01 03			Digging .....New prices			5 lbs. and over.....50&10%			Latches only. 1 90 1 90 ....		
Per doz. 12 00 14 40			Scoop .....New prices			Masons'.			Screen Door.		
Goodell's Single Gear, per doz. ....15 75			Header.			Single and Double Face.....50%			Cast Iron .....gross \$10 00		
Goodell-Pratt No. 4½ per doz. list, less.....30%			3-tine.....New prices			Handles.			Steel ..... " 7 00		
Goodell-Pratt No. 379 per doz. list, less .....30%			4- " .....New prices			Auger.			Spring.		
Reciprocating.			Manure.			Common Assorted per doz. \$0 75			Chicago .....Add 12½% to list		
Goodell's.....per doz. 26 00			4-tine.....New prices			Pratt's Adjustable, Nos. 1 & 2, per doz.....6 00			Columbia Dbl. Acting, .....40&10&5@		
DRIVERS, SCREW			FREEZERS—ICE CREAM			Ives' Adjustable...per set, 1 35			Gem .....25%		
Standard .....Nets			White Mountain 1-quart...@			Chisel.			Ideal Detachable, per gro. \$11 00		
Lock Ferrule .....			" " 2 " .....@			Hickory, Tanged, Firmer, Assorted, 55c; Large, 85c per doz.			Matchless .....40%		
Champion .....			" " 4 " .....@			Hickory, Socket Firmer, Assorted, 70c; Large size, 80c per doz.			New Idea .....per gro. \$7 20		
Champion Pattern .....			" " 6 " .....@			Hammer.			Oxford .....20%		
Clark's Interchangeable ..			Arctic.....1 " .....@			Adze Eye...per doz. 40c to \$1 00			Wrought Iron.		
Edison .....			" " 2 " .....@			Blacksmiths' " 45c@1 00			New Lists .....		
Reed's Lightning .....			" " 4 " .....@			Machinists' " 50c@1 00			Light Strap Hinges.....5&5%		
Goodell's Spiral .....			" " 6 " .....@			File, assorted, 30c; Large, 35c per doz.			Heavy Strap Hinges...20&7½%		
Yankee Ratchet .....			GIMLETS.			Hammer.			Light T Hinges...List plus 45%		
" Spiral .....			Discount .....35@40%			Screw Driver.			Heavy T Hinges...List plus 45%		
EAVES, TROUGH			GLUE.			Assorted .....6			Extra Heavy T Hinges. 15&5%		
50% off Standard List.			Bulk.			Large .....9			Screw Hook and Strap.		
ELBOWS—Stove Pipe			B Amber.....per lb. 35c			Shovel and Spade.....25%			6 to 12 in....per 100 lbs. \$7 75		
1-piece Corrugated, Uniform			A White....." 40c			Wood Boxes.			14 to 20 in...." " 7 50		
Doz.			H. S. Amber....." 32c			Frazer's .....per gro. \$13 00			22 to 36 in...." " 7 25		
6-inch .....\$2 25			Liquid.			Hub Lightning .....7 50			Screw Hook and Eye.		
6-inch .....2 30			Army & Navy.....40%			GIMLETS.			¾ in.....per doz. pair \$2 50		
7-inch .....2 60			Le Page's—			Discount .....35@40%			½ in....." " 3 50		
Uniform, Collar Adjustable			List "A".....37½%			Bulk.			¾ in....." " 5 00		
Doz.			List "B".....33½%			B Amber.....per lb. 35c			HOES.		
6-inch .....\$2 65			List "C".....25%			A White....." 40c			Garden .....Net		
6-inch .....2 70			GREASE, AXLE.			H. S. Amber....." 32c			Grub.		
7-inch .....2 00			Wood Boxes.			Liquid.			Extra .....New prices		
Uniform, Collar Adjustable			Frazer's .....per gro. \$13 00			Army & Navy.....40%			Hazel..... per doz. New prices		
Doz.			Hub Lightning .....7 50			Le Page's—			Ladies' and Boys' ....New prices		
6-inch .....\$2 65			Hammer.			List "A".....37½%			Mortar .....New prices		
6-inch .....2 70			Adze Eye...per doz. 40c to \$1 00			List "B".....33½%			Planter's Eye.....New prices		
7-inch .....2 00			Blacksmiths' " 45c@1 00			List "C".....25%			Weed .....New prices		
Uniform, Collar Adjustable			Machinists' " 50c@1 00			Hooks.			Awning. No. 60.....per gro. 50%		
Doz.			File, assorted, 30c; Large, 35c per doz.			Awning. No. 60.....per gro. 50%			Belt.		
6-inch .....\$2 65			Hammer.			Brown's .....70&5%			Jones' .....65&5%		
6-inch .....2 70			Adze Eye...per doz. 40c to \$1 00			See Stops, Bench.			Bench.		
7-inch .....2 00			Blacksmiths' " 45c@1 00								
Uniform, Collar Adjustable			Machinists' " 50c@1 00								
Doz.			File, assorted, 30c; Large, 35c per doz.								
6-inch .....\$2 65			Hammer.								
6-inch .....2 70			Adze Eye...per doz. 40c to \$1 00								
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6-inch .....2 70			Adze Eye...per doz. 40c to \$1 00								
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7-inch .....2 00			Blacksmiths' " 45c@1 00								



<b>Box.</b> Inch..... 5    7    10    12 Per doz. \$2 50   3 75   3 25   3 85	<b>Bush.</b> Common Axe Handle, per doz. ....\$22 00	<b>Chain.</b> Inch..¾&5/16    ¾    7/16    ½ Pr 100 \$7 60-8 10   9 75   11 50   12 60	<b>Clothes Line.</b> Japanned .....per doz. 48c@1 40 Galvanized..... "         75c@2 50	<b>Coat and Hat.</b> Common Wire per gro. 1 25-1 65	<b>Conductor.</b> Iwan's Tinned Sickle.....List	<b>Corn.</b> Common, riveted, painted red .....per doz. Nets Little Giant..... "	<b>Gate.</b> See Goods, Bright Wire.	<b>Grass.</b> Common Nos. 1    3    5    7 Per Doz...\$4 50   2 50   3 75   3 25	<b>Hammock.</b> With plate.....per doz. 1 10 With screw..... "         1 00	<b>Lambrequin, or Drapery,</b> per gro.....30c	<b>Picture</b> .....50%&50&10%	<b>Potato and Manure</b> .....Nets	<b>Screw.</b> Brass .....70% (See Goods, Bright Wire.)	<b>Seat Spring</b> .....per lb. 5½c
<b>HOSE, GARDEN.</b>														
Guaranteed 3 ply ¼ inch.....Per ft. 16 ¢ "      4 ply ¼ inch.....18 ¢ "      5 ply ¼ inch.....13 ¢														
<b>COTTON COV. RUBBER HOSE.</b> High Grade Apache 1" guar. press. 400 lbs.....48c														
<b>HUSKERS.</b>														
Boss. Nos. .... B    E Per doz.....New Nets No. 59.....per doz. New Nets														
<b>IRON, FIG.</b> See Metals.—First column.														
<b>IRONS.</b>														
Curling. C.....per doz. \$4 40 B....."         50 A....."         58 Princess....."         1 25 Thelma....."         1 35 Pinking....."         1 00														
<b>Plane.</b> Wood Bench...Add 10% to List														
<b>Sad.</b> Charcoal .....per doz. \$11 00 Common, polished, per 100 lbs. .... 7 75 No. 70 Asbestos....\$1 50 net No. 100 " ..... 1 75 net Common, nickel plated... 8 25 Mrs. Pott's No. 50 J, Enterprise, per set Nets No. 55 J, " " " " No. 50 T, " " " " No. 55 T, " " " " Tailors' Sad.....per lb. " Tailors' Goose.....per lb. "														
<b>Ideal.</b> 6 lb. Household .....\$3 50 9 lb. Dressmakers' .. 4 25 14 lb. Tailors' Goose... 5 50														
<b>Tuyere.</b> Single Duck Nest...per doz. \$5 25 Double Duck Nest.. "         6 25 Sutton .....each 2 60														
<b>JACKS.</b> Locomotive .....30%														
<b>Wagon.</b> Richard's No. 1..per doz. \$15 50 Miller ..... 20 00 Oliver, Nos. .... 0    00 Each .....\$0 60 \$0 80 Standard, Nos. .... 1    2 Each .....\$0 60 \$1 00 R-W Big Lift.....40% Tiger .....40%														
<b>KETTLES.</b> Braas .....15% Cauldron .....40&5% Copper .....per lb. 27 Maslin .....40&10% Sugar .....50%														
<b>KNIVES.</b> <b>Beet Topping.</b> Clyde, 9-in. Scimiter Blade, doz. ....\$3 85 California ..... 2 40														
<b>Butcher,</b> Per doz. Beechwood Handles, 6" blade .....\$4 00 Beechwood Handles, 7" blade ..... 4 65 Beechwood Handles, 8" blade ..... 5 65 <b>Cooper's Hoop</b> .....15%														
<b>Corn.</b> Clipper .....per doz. \$1 75 Diston's ..... 2 75 Earle's ..... 3 00 Woodford ..... 2 25														
<b>Drawing.</b> Standard .....List&5% Adjustable .....15% Barton's Carpenters'.....15%														
<b>Hay.</b> Iwan's Solid Socket..doz.\$13 00 Heath's ..... 13 00 Iwan's, Sickle Edge.. " 18 00 Iwan's Imp'd Serrated " 18 00														
<b>Hedge.</b> Challenge .....per doz. \$6 00 Diston's ..... 3 75														
<b>Mincing.</b> Common, Single .. "         60 Common, Double.. "         90 Streeter, 4-blade.. "         1 20 Streeter, 6-blade.. "         2 00														
<b>Putty.</b> Common ...per doz. \$0 75@1 50 Lander's ... "         1 75@2 50														
<b>Scraping.</b> Beech Handle..... 90@1 10 Lander's ..... 5 50@6 50														
<b>KNOBES.</b> <b>Doors.</b> Mineral .....per doz. \$1 80 Porcelain ..... 1 90 Jet ..... 2 00														
<b>LADDERS.</b> <b>Common Long.</b> Per ft. ....17c@23c														
<b>Extension.</b> Per ft. .... 22 to 28														
<b>Step.</b> Common, per ft.....23c Common, with Shelf, add 10c.. IXL .....34c Challenge, 6 to 9 ft.....55c 10 to 16 ft.....60c														
<b>LANTERNS.</b> <b>Bull's Eye Police.</b> 3-in. Flash Light..per doz. \$13 00														
<b>LEADERS, CATTLE.</b> Nos.....51    52 Per doz.....\$1 35   1 45														
<b>LEATHER, LACE.</b> Rawhide ¾".....100 ft. \$2 60 ½"..... 4 40														
<b>LEATHERS, PUMP.</b> Valve and Plunger.....10%														
<b>LIFTERS.</b> <b>Stove Cover.</b> Coppered ...per gro. \$3 25@5 50 Alaska ..... 8 00 Alaska ..... 10 00														
<b>Transom.</b> Payson's .....55%														
<b>LINES.</b> <b>Chalk.</b> Twisted in 20-ft. hanks. Nos. 4    6    7    8    9 Gro.....Prices on Application Twisted in 50-ft. balls. Nos. .... 1    2    3    4 Per doz.....Prices on Application Braided in 20-ft. hanks. Nos. .... 0    1    2    3 Per doz.....Prices on Application Mason's... " " " "														
<b>LOCKETS.</b> 60-ft. Jute.....per doz. \$0 95 60-ft. Sisal..... "         10 50-ft. Cotton..... "         15 50-ft. Braided Cot- ton ..... 25														
<b>LINING, STOVE.</b> Bricks.....per crate 42c														
<b>LOCKS.</b> <b>Barn Door.</b> No. 60 Stearns.....per doz. \$12 00 No. 80 " ..... 24 00														
<b>Riveting.</b> Stearns No. 1....per doz. \$16 00														
<b>Tenoning.</b> No. 50 Peace's Spoke, each \$16 00														
<b>MAIL BOXES.</b> See Boxes.														
<b>MALLETS.</b> <b>Carpenters'.</b> Fibre Head, No. 2 per doz. \$16 50 "         No. 3         19 50 "         No. 4         28 50 Round Hickory "         per doz. \$3 00—5 00 Round Lig- numvitae.. "         6 25—10 50 Square Hickory "         3 50—5 50 Square Lig- numvitae.. "         8 00—12 00														
<b>Tinners'.</b> Hickory .....per doz. \$2 25														
<b>MATS.</b> <b>Door.</b> National Rigid.....50&10&5% Acme Steel Flexible.....50%														
<b>Stove.</b> No. 2.....per gro. Nets No. 1..... " " No. 1 Asbestos Toasters or wire-covered Stove Mats, with handle.....per doz. 1 10 No. 2 Asbestos Toasters, with ring.....per doz. 60														
<b>MATTOCKS.</b> Plumbs .....25%														
<b>MAULS.</b> Iron, lbs..... 10    13    16    18 Per doz...Prices on Application Wood Face, lb... 10    12    14 Per doz...Prices on Application														
<b>Wood Choppers'.</b> Lake Superior & Oregon pat. ....40&5%														
<b>MEASURES.</b> Galvanized, doz.....Nets Japanned, doz.....Nets														
<b>MILLS, COFFEE.</b> Enterprise .....16 2-3% Parker .....50&5% Arcade .....40-10%														
<b>MITRE BOXES.</b> See Boxes.														
<b>MOPS.</b> Cotton, Star (Cut Ends). Pounds 12' 15' 18' 24'-3 oz. Per doz. \$4 50   5 65   6 75   9 00														
<b>MOWERS, LAWN.</b> Gladiator—B. B. Inches ..... 16    18    20 Each .....\$6 50   7 25   8 00														
<b>King Universal—B. B.</b> Each .....\$5 25   5 75   6 00 Inches ..... 14    16    18 Big Giant.....\$3 50   3 90   4 25														
<b>NAILS.</b> Cut Steel...Prices on Application Cut Iron.... " " "														
<b>Wire.</b> Small Lots, Prices on Application														
<b>Cement Coated.</b> Small Lots, Prices on Application														
<b>Horshoe.</b> Ausable .....55&5% Capewell .....15% Perfect .....55&5% Putnam .....20&5% Star .....30&5%														
<b>Picture.</b> Brass Heads .....25% Brads .....50&5% Furniture.....List plus 15%														
<b>NAIL P</b>														

PARERS.		Fencing.		PUNCHES.		SAWS.	
<b>Apple.</b>		Black Bull .....All Nets		<b>Conductors.</b>		<b>Band.</b>	
Goodell's .....per doz.	\$10 80	Farmers' Choice .....All Nets		No. 22 .....per doz.	\$3 00	E. C. Atkins & Co.	Prices on applic'n
Turntable ..... "	11 40	Russell's .....All Nets		Machine .....per lb.	25	Diaston's	Prices on applic'n
White Mountain... "	8 40	<b>Flat and Round Nose.</b>		<b>Saddlers'.</b>		<b>Buck.</b>	
Reading, No. 78... "	11 40	Bernard's .....New Prices		Common.....per doz.	1 50 to 5 00	Diaston's	Prices on applic'n
<b>Potato.</b>		Lodi .....New Prices		<b>Revolving Spring.</b>		Jackson's	New nets
Goodsell's Saratoga, 10 1/2 in., doz.....	6 50	Paragon .....New Prices		Stearns, No. 10.....per doz.	\$8 00	<b>Butchers'.</b>	
Goodsell's Saratoga, 5 in., doz.....	5 50	<b>Tinners'.</b>		" No. 40..... "	16 00	E. C. Atkins & Co.	Prices on applic'n
<b>PICKS.</b>		Hollow .....Net List		" No. 60..... "	19 00	Diaston's	Prices on applic'n
Adze Eye Ore.....	22 1/2 %	Solid .....each, 10c		<b>PUTTY.</b>		<b>Circular.</b>	
Drifting and Poll Picks.....	22 1/2 %	<b>PLUMBS AND LEVELS.</b>		Strictly pure.....per 100 lbs.	\$4 25	E. C. Atkins & Co.	Prices on applic'n
Plumbs, Railroad .....22 1/2 %		Common .....Nets		<b>RAIL.</b>		Diaston's	Prices on applic'n
Surface .....22 1/2 %		Cook's .....40%		<b>Barn Door.</b>		Hiles'	New nets
<b>PINCERS.</b>		Davis' Iron.....25%		Matchless, 1-in.....	5c	<b>Compass.</b>	
Carpenters', cast steel.		Davis' Inclinator.....15%		Matchless, 1 1/4-in.....	7c	E. C. Atkins & Co.	Prices on applic'n
No. .... 6 8 10 12		<b>POINTERS, SPOKE.</b>		Storm King .....5c		Diaston's	Prices on applic'n
Each, \$0.63 .80 1.05 1.15		Stearns' No. 1.....per doz.	\$10 00	<b>Sliding Door.</b>		<b>Coping.</b>	
Blacksmiths' .....45%		" No. 2..... "	12 00	Bronzed wrought iron,		E. C. Atkins & Co.	Prices on applic'n
Heller's .....40%		<b>POKERS, STOVE.</b>		.....per ft. 8 1/4c		Diaston's	Prices on applic'n
<b>PINS</b>		Wrt Steel, str't or bent,		<b>RAKES.</b>		<b>Cross-Cut.</b>	
Clothes.....per box of 5 gro.	\$0 95	Nickel Plated, coll han'l's "	1 10	Garden.....Per doz.		E. C. Atkins & Co.	Prices on applic'n
<b>Picket.</b>		<b>POLISH.</b>		Steel, Bow, 12-in. Teeth.....\$8 50		Diaston's	Prices on applic'n
Fluter, 15-in.....per doz.	\$1 10	Metal.....		Steel, Bow, 14-in. " .. 9 25		<b>Dehorning.</b>	
Fluted, 21-in..... "	1 60	Wizard, 6 -oz.. per gross	\$18 00	Malleable Iron, 12-in. " .. 4 75		Diaston's	Prices on applic'n
Spiral ..... "	1 90	" 1/2-pt. " " 20 40		Malleable Iron, 14-in. " .. 5 00		<b>Flooring.</b>	
<b>PIPE.</b>		" 1-pt. " " 36 00		<b>RAZORS—SAFETY.</b>		E. C. Atkins & Co.	Prices on applic'n
<b>Conductor.</b>		" 1-qt. " doz. 6 00		Gillette .....per doz.	\$45 00	Diaston's No. 7	Prices on applic'n
Plain Round and Round Corru-		" 1/2-gal. " " 10 80		Auto Strop ..... 45 00		Diaston's Nos. 8, D8, 13, 76,	
gated.....		" 1-gal. " " 18 60		Gem (3 doz. lots) .. 8 00		112, D100, and 120,	
29 Gauge.....50%		<b>Stove.</b>		Ever Ready ..... 8 00		<b>Keystone</b>	
28 " .....40%		Black Eagle Paste 5 -oz..\$13 80		Ever Ready (3 doz. lots) " 8 00		<b>Keyhole.</b>	
26 " .....30%		" " 1/2-lb.. 17 40		<b>RAZOR STROPS.</b>		E. C. Atkins & Co.	Prices on applic'n
24 " .....List		" " 1-lb.. 31 20		Star (Honing) .....50%		Diaston's	Prices on applic'n
Square Corrugated A and B and		" " 5-lbs. 5 25		<b>REGISTERS.</b>		<b>Miter Box.</b>	
Octagon.....		per case ..... 5 25		Cast Iron .....10%		E. C. Atkins & Co.	Prices on applic'n
29 Gauge.....40%		Black Eagle Liquid, 6-oz.	15 60	Steel and Semi-Steel.....10%		Diaston's	Prices on applic'n
28 " .....35%		per gross ..... 15 60		Solid Brass or Bronze Metal		<b>Panel.</b>	
26 " .....25%		Black Kid Paste, 5 lbs.	6 00	.....prices on application		E. C. Atkins & Co.	Prices on applic'n
24 " .....List		per case ..... 6 00		Baseboard .....10%		Diaston's No. 7	Prices on applic'n
Galvanized Toncan Metal, Gen-		Black Jack Liquid, 1/2-pt.	15 60	Adjustable Ceiling Ventilators 10%		<b>Patternmakers'.</b>	
uine O. H. Iron, Lyonore		per gross ..... 15 60		<b>REGISTER FACES.</b>		E. C. Atkins & Co.	Prices on applic'n
Metal, Charcoal Iron and		Black Jack Paste, No. 10,	13 20	Japanned, Bronzed and Plated,		Diaston's	Prices on applic'n
Keystone C. B.		per gross ..... 13 20		4x6 to 14x4.....10%		<b>Pruning.</b>	
Plain Round and Round Corru-		<b>POWDER.</b>		14x4 to 38x42.....25%		Diaston's	Prices on applic'n
gated.....		See Ammunition.		<b>REVOLVERS.</b>		<b>Stairbuilders'.</b>	
28 Gauge.....40%		<b>PRESSES, FRUIT AND JELLY.</b>		Iver Johnson Safety Automatic		E. C. Atkins & Co.	Prices on applic'n
26 " .....30%		Enterprise Manufacturing Co. 25%		Hammer .....New Nets		Diaston's	Prices on applic'n
24 " .....List		<b>PRIMERS.</b>		Hammerless ..... "		<b>Wood.</b>	
Square Corrugated A and B Pol-		See Ammunition.		I. J. Model 1900..... "		E. C. Atkins & Co.	Prices on applic'n
YGON and Octagon.....		<b>PRUNERS.</b>		<b>RINGS AND RINGERS.</b>		Diaston's	Prices on applic'n
28 Gauge.....35%		<b>PULLERS.</b>		Ball.....2 1/2-in. 3-in.		<b>SAW BUCKS—See Bucks.</b>	
26 " .....25%		<b>PULLEYS.</b>		Per doz.....\$2 40 \$2 65		<b>SAW SETS—See Sets.</b>	
24 " .....List		Awning—Jap'd .....10%		Rea's Improved Self-		<b>SAW TOOLS—See Tools.</b>	
14 and 16-oz. Copper, all de-		Clothes Line .....10%		Piercing copper,		<b>SAW FRAMES.</b>	
signs .....List.		Hay Fork.....		.....doz. 3 40		Common, plain.....per doz. \$1 50	
<b>Portico Elbows.</b>		Iron Wheel, 5-in..per doz.	2 50	Steel, per doz.....1 50 1 80		Common painted.. " 2 10	
Galvanized and Terne Steel.		Wood Wheel, 6-in. " 2 65		<b>Hog.</b>		<b>SCALES.</b>	
1 -Inch .....35%		Wood Wheel, 6-in.,	3 00	Blair's Rings .....per doz. \$ 75		Pelouze .....40&10%	
1 1/4-Inch .....35%		pass knot..... "		Blair's Ringers..... " 1 00		<b>SCISSORS.</b>	
1 1/2-Inch .....35%		<b>Sash.</b>		Brown's Rings..... " 72		Star .....60%	
2 -Inch .....35%		Common .....Net		Brown's Ringers..... " 1 00		<b>SCOOPS.</b>	
Tubing .....25%		Common-Sense, 2-in.....Net		Hill's Rings..... " 1 00		1/2 bu "Hercules".....per doz. 3 70	
Discounts on Round apply on		Empire Pattern, 2-in.....Net		Hill's Ring, boxes " 72		1-bu. "Hercules"..... " 5 00	
sizes 2-inch to 6-inch inclusive.		Ideal .....Net		Major Rings..... " 60		<b>SCRAPERS.</b>	
Freight allowed on 15 dozen or		Steel .....Net		Perfect Ringers..... " 1 50		Triangular, No. 6 per doz. \$6 25	
more, to all points where		<b>SAW.</b>		Wolverine Rings..... " 1 65		Cubic ft. .... 7 5 3	
freight rate does not exceed		See Metals in Column 1.		Wolverine Ringers " 1 10		With runners, ea. \$7 00 \$5 50 \$2 20	
\$1.00 per 100 lbs. Less than		<b>FLIERS.</b>		<b>RIVETS.</b>		<b>SCREEN DOOR HINGES.</b>	
15 dozen F. O. B. Factory.		Giant .....per doz. \$14 50		Copper Belt....Add 15% to list		Cast iron .....gross, \$13 00	
Terms: 30 days net, 2% ten days.		Never-Slip ..... 17 00		Coppered Iron .....30%		Steel ..... " 9 50	
Standard Gauge Conductor Pipe,		<b>PLANES.</b>		Tinners' .....30%		<b>SCREWS.</b>	
plain or corrugated.		Stanley Iron Bench.....net		<b>ROPE.</b>		Iron, ins. 1 1 1/4 1 1/2	
Not Nested .....35-5%		<b>PLATES, TIN.</b>		Cotton.....		\$6 32 \$7 37 9 45 16 50	
Nested solid .....40%		See Metals in Column 1.		1/4, 5-16 in. Com. on reels,		Wood, white maple, per doz. 6 00	
<b>Stove.</b>		<b>PUMP.</b>		per lb. ....85c		Hand—Wood .....50%	
29 Gauge, 3-inch.....\$19 00		Pitcher Spout.....		1/4, 5-16 in. Com. in coils,		Hand Rail .....22	
" 4-inch.....19 50		Nos. .... 1 2 3 4		per lb. ....85c		Jack .....20%	
" 5-inch.....20 25		Each .....Nets		Sisal.....		Lag or Coach—all sizes, gimlet	
" 6-inch.....21 00		<b>SPRAY.</b>		1st Quality .....18 1/2c		pointed .....45-5%	
" 7-inch.....23 00		Midget Junior.....per doz. 3 75		No. 2 .....17 1/2c		Saw—Centennial.	
T-Joint Made up.		New Misty ..... " 6 00		<b>RIVET SETS.</b>		Nos. .... 1 2 3 4	
6-inch .....per 100 \$60 00		Crescent ..... " 6 50		See Sets.		Per doz .....47c 55c 75c 90c	
<b>Furnace Pipe.</b>		<b>SCYTHES.</b>		<b>RULES.</b>		Wood.	
Double Wall Pipe and Fit-		Clipper, Grass .....per doz. \$13 50		Prices on application		F. H. Bright .....70-20%	
tings .....20%		Honest Dutchman.. " 13 70		Lufkin's Hickory Board....		R. H. Blued .....67 1/2-20%	
Single Wall Pipe, Round		<b>SAWS.</b>		Lufkin's Log ..... "		F. H. Jap'd .....62 1/2-20%	
Pipe Fittings .....30%		<b>SAW FRAMES.</b>		Lufkin's Boxwood ..... "		F. H. Brass .....60-20%	
Galvanized and Black Iron		<b>SAW SETS—See Sets.</b>		Lufkin's Zigzag ..... "		R. H. Brass .....57 1/2-20%	
Pipe, Shoes, etc.....15%		<b>SAW TOOLS—See Tools.</b>		<b>SAW FRAMES.</b>		<b>SCYTHES.</b>	
<b>FLIERS.</b>		<b>SAW BUCKS—See Bucks.</b>		Common, plain.....per doz. \$1 50		Clipper, Grass .....per doz. \$13 50	
Giant, Button's—Nets.		<b>SAW SETS—See Sets.</b>		Common painted.. " 2 10		Honest Dutchman.. " 13 70	
Cutting.		<b>SAW TOOLS—See Tools.</b>		<b>SAW FRAMES.</b>		<b>SCYTHES.</b>	
Bernard's .....New Prices		<b>SAW SETS—See Sets.</b>		Common, plain.....per doz. \$1 50		<b>SCYTHES.</b>	
Lodi .....New Prices		<b>SAW TOOLS—See Tools.</b>		Common painted.. " 2 10		<b>SCYTHES.</b>	
Paragon .....New Prices		<b>SAW TOOLS—See Tools.</b>		<b>SAW FRAMES.</b>		<b>SCYTHES.</b>	



SETS.		SPRINKLERS, LAWN.		TAPES, MEASURING.		WARE.	
Nail.		Stearn's No. 1.....per doz. \$11.50		Asses' Skin.....List & 40%		Glue Pots.	
Square head.....per doz. \$1 25		<b>SQUARES.</b>		Lufkin's Steel...Prices on applic'n		Tinned.....Add 15% to list	
Cup point, knurled " 1 15		Steel and Iron.....Nets new list		Lufkin's Metallic Prices on applic'n		Enameled.....30%	
<b>Rivet.</b>		(Add. for bluing, \$3.00 per doz. net)		<b>THERMOMETERS.</b>		<b>WASH BOARDS—See Boards</b>	
Farmers'.....per doz. \$2 10		Mitre.....		Tin Case.....per doz. 86c @ \$1 25		<b>WASHERS.</b>	
Tanners'.....25%		Try.....		Wood Back... " \$2 00 @ 12 00		Standard O. G. cast iron, per	
<b>Saw.</b>		Try and Bevel.....		Glass.....12 00		lb.....	
Alken's Pattern...per doz. \$6 50		Try and Miter.....		<b>TIES.</b>		Wrought steel in 5-lb. boxes,	
Disston's Monarch " 7 20		Fox's.....per doz. \$5.00		Bale.		per lb.:	
Disston's X-Cut... " 13 50		Winterbottom's.....10%		Single Loop, carload		In 3/16 1/4 5/16 3/8 1/2	
Leach's " " 80		<b>SQUEEZERS, LEMON.</b>		lots.....75&7%		1/8 1/4 1/2 3/4 1	
Nash's Hand..... " 3 15		Common Wood.....per doz. \$0 70		Single Loop, less than		11 1/2c 11c 11c 11c	
Nash's X-Cut..... " 4 20		Porcelain Lined, Wood " 1 25		car lots.....70&15%		<b>WEDGES.</b>	
Stillman's Lever... " 1 20		Boss, malleable iron " 1 20		<b>TOOLS, SAW.</b>		Ax.....per doz. Nets	
Stillman's X-Cut... " 2 50		Iron frame, por'n " 1 90		Disston's Universal.....40%		Galling.....per lb. Nets	
Whiting Pattern, " 7 50		bowl..... " 2 35		<b>TRAPS.</b>		Saw.....per lb. 3 1/2	
No. 21.....		Little Giant, tin'd " 4 00		Game with Chains. Per doz.		<b>WEANERS.</b>	
Eccentric Anvil, " 14 50		iron..... " 3 60		Victor No. 1.....\$2 01		Calf.	
Hand No. 395, " " " "		Drum, japanned... " 4 50		Onsida Jump No. 1.....2 75		Fuller's, per doz. \$2 00 to \$2 50	
N. P. Morrill Pat- " " " "		<b>STAPLES.</b>		Newhouse No. 1.....5 62		Tyler's Safety, per	
<b>SHARPENERS, SKATE.</b>		Blind.		<b>MOUSE AND RAT</b>		doz.....1 25 to 2 40	
Diamond.....per doz. \$1 60		Barbed.....per lb. 21 @ 22c		Net per gross		Carroll's, per doz. 3 00 to 3 75	
Perfect.....1 20		Butter, Tub..... " 16 @ 19c		Out O'Sight Mouse.....\$ 8 00		Hoosier, per doz. 3 50 to 4 00	
<b>SHEARS.</b>		Fence—		" Rat.....15 00		Shaw Perfected.. 3 00 to 3 75	
Nickel Plated, Straight, 6".....\$12 90		Polished.....per 100 lbs. \$5 45		" Mole.....100 00		<b>WEIGHTS.</b>	
" " " 7".....14 85		Galvanized..... " 6 15		244 Pocket Gopher.....20 00		Hitching.....per lb. Nets	
" " " 8".....16 30		Netting.		Victor Mouse.....2 60		Sash—f.o.b. Chicago	
Japanned, Straight 6".....11 00		Galvanized.....per 100 lbs. 6 50		Hold Fast Mouse.....2 60		Ton lots, per ton.....\$73 00	
" " " 7".....12 40		<b>Wrought.</b>		Victor Rat.....11 00		Smaller lots, per ton.....75 00	
" " " 8".....13 80		Wrought Staples, Hasps and		Hold Fast Rat.....11 00		<b>WHEEL BARROWS.</b>	
<b>Tinners'—See Snips.</b>		Staples, Hasps, Hooks and		Official Rat.....13 50		No. 4 Tubular Steel....@ \$10 25	
<b>SHEAVES, SLIDING DOOR.</b>		Staples, and Hooks and		Wood Choker Mouse, 4		Common Tray or Stave	
Common.		Extra heavy.....35%		Holes.....11 00		Tray.....@ 5 00	
Inches.....3 4 5		<b>STEELYARD.</b>		<b>TROWELS.</b>		Angle leg, garden.....@ 3 00	
Per set.....\$1 40 1 75 2 40		Discount 25%.		Brick.		<b>WHEELS.</b>	
<b>Hatfield's.</b>		<b>STONES.</b>		Clover Leaf.....30%		Carborundum.....50%	
Per set.....\$1 80 2 10 2 75 25		Axe.		Brade's.....15&5%		Emery.....60%	
<b>SHELLS—See Ammunition.</b>		Hindustan.....per lb. New Nets		Disston's.....30%		Well, Ins..... 3 10 13	
<b>SHELLERS, CORN.</b>		More Grit..... " "		Rose's.....Net		Per doz.....\$5 50 7 25 8 50	
Union.....per doz. \$6 75		Washita..... " "		<b>Plasterers'.</b>		12-in. heavy hoisting,	
<b>SHIELDS</b>		<b>Emery.</b>		Clover Leaf.....40%		per doz.....\$25 00	
pannion Belt Shields.....60%		No. 126.....per doz. New Nets		Disston's.....25%		<b>WIRE.</b>	
<b>SNOES.</b>		Oil—Mounted.		W. & MCP.....Net		Brass.	
Conductor.....60%		Arkansas Hard		<b>TRUCKS.</b>		In coils.....Nets	
<b>SHOT—See Ammunition.</b>		No. 7.....per doz. New Nets		Bag.....each \$3 75		In 1-lb. spools, new list....Nets	
<b>SHOVELS AND SPADES</b>		Arkansas Soft.. " "		Warehouse or store.		<b>Broom—Tinned.....Nets</b>	
Coal.		Washita No. " "		No. 1, each.....\$24 50		Cable—Same Price as Barbed Wire.	
No. 2 Woodford...per doz. \$5 50		Oil—Unmounted.		No. 2, ".....22 50		<b>Copper.</b>	
No. 13..... " 4 00		Arkansas Hard..per lb. New Nets		<b>TUBS, WASH.</b>		In coils.....Nets	
Ames', new list..Discount, 12 1/2%		Arkansas Soft.. " "		Standard, Wood.		1-lb. spools, new list....Nets	
Neverbreak, hollow bck, blk, Nets		Lily White..... " "		Nos.....3 2 1 large		<b>Fence—Smooth. An'eal'd Galv'd</b>	
National..... " "		Queer Creek..... " "		Per doz \$9 50 11 25 12 75 15 50		Nos. 6 to 8, less than	
Buckeye..... " "		Washita..... " "		Galvanized.		car, per 100 lbs. \$4 25 \$4 95	
Mohawk..... " "		Scythe.		No.....1 2 3		<b>Hair—New List.....40 &amp; 10%</b>	
<b>Bar Drain &amp; Ditching</b>		Black Diamond...per gro. New Nets		Per doz.....13 75 15 95 18 60		<b>Market.</b>	
Iwan's Perfection.....\$30 00		Crescent..... " "		<b>TWINE.</b>		Market Quotation	
<b>Railroad, etc.</b>		Green Mountain " " "		3-ply Cotton Wrapping....		Bright, full bds..... " "	
Black Diamond...per doz. Net		LaMolle..... " "		4 " " " " " "		Bright, broken bds.... " "	
Crescent..... " "		Extra Quinne- " " "		4 " " " " " "		Coppered, full bds.... " "	
Keystone..... " "		bog..... " "		4 " " " " " "		Coppered, broken bds.. " "	
Star..... " "		Red End..... " "		3 " " " " " "		Tinned, full bds..... " "	
Hollow Back..... " "		<b>STOPS, BENCH.</b>		India Hemp, 1/4-lb. balls.		Tinned, broken bds.... " "	
Ames', new list, Discount 12 1/2%		No. 10 Morrill pat-		No. 18.....		<b>Picture—In coils. 30% @ \$0 &amp; 10%</b>	
<b>Snow.</b>		tern.....per doz. \$11 00		2-ply Jute, 1-lb. balls.....		In 5-lb. spools...per lb....26c	
Galvanized, with wood han-		No. 11 Stearns pat-		<b>SEINS.</b>		<b>WRENCHES.</b>	
dle, No. 56.....\$1 45		tern..... " 10 00		Soft.....per lb.....Quotation		Coes Steel Handle, 6-inch.. 30%	
No. 55.....1 55		No. 15 Smith pattern " 7 00		Med..... " " " "		" " " " " " 30%	
<b>Alaska Steel</b>		<b>STOPPERS, FLUE.</b>		Hard..... " " " "		" " " " " " 30%	
D-Handle.....per doz. \$3 50		Common.....per doz. \$1 10		Staging, 1/4-lb. ball, size 21		" " " " " " 30%	
Long Handle..... " 3 00		Gem, flat, No. 3.....1 00		" " " " " 24		" " " " " " 30%	
<b>SINKS.</b>		Gem, No. 1..... " 1 10		" " " " " 27		Coes All Patterns.....30%	
Cast Iron.		<b>STOVE PIPE—See pipe.</b>		Bagging, 1/4-lb. ball, size		Bemis & Call's:	
Painted, 16x24.....Net		<b>STOVE BOARDS—See Boards.</b>		3-ply, "B" in hanks.....		Adjustable 8, 10%; Adjustable 8	
Enameled, White, 16x24.... " "		<b>STOVE POLISH—See Polish.</b>		4 " " " " " "		Pipe, 10%; Briggs' Pat-	
<b>Wrought Steel.</b>		<b>STRAPS.</b>		3 " " " " " "		tern.....25%	
Painted, 16x24..... " "		Skate.....per doz. 85c & 1 20		3 " " " " " "		Combination Bright.....10%	
<b>SLEDGES—See Hammers.</b>		<b>STRETCHERS.</b>		3 " " " " " "		Steel Handle Nut.....25%	
<b>SNAPS, HARNESS</b>		Carpet.		Fodder or Lath.		Combination Black.....25&5%	
Covered Spring.....Add 30		Bullard's.....per doz. \$3 90		170 strand.....		Merrick Pattern.....25&5%	
Judd's Pattern...Add 33 1-6% to list		Excelsior..... " 5 25		<b>VISES.</b>		<b>Knife Handle Pattern.</b>	
<b>SNATHS.</b>		Malleable Iron..... " 70		No. 21, Hand.....\$5 00		No. 42, Screw Wrench, List	
Double Ring, Bush...per doz. \$9 75		Wrought Steel.....per gro. 4 50		Oval Slide.		plus.....5%	
Patent Loop, Bush... " 10 00		<b>TACKS.</b>		Inches 2 2 1/2 3 3 1/2 4 1/2		No. 60, Steel Handle.	
Patent Loop, Grass.. " 8 75		Bill Posters' 6-oz., 25 lb. boxes,		Each \$2 70 \$3 20 \$3 60 \$4 20 \$5 75		<b>WRINGERS.</b>	
<b>SNIPS, TINNERS'</b>		per lb.....15c		No. 1, Genuine Wentworth,		No. 790, Guarantee, per doz. \$69 00	
Clover Leaf.....40&10%		Upholsterers' 6-oz., 25-lb.		Noiseless Saw...per doz. 15 00		No. 770, Bicycle... " 66 00	
National.....40&10%		boxes, per lb.....15c		No. 2, Genuine Wentworth,		No. 110, Domestic.. " 59 00	
Star.....50%		<b>SWIVELS.</b>		Noiseless Saw...per doz. 22 50		No. 110, Brighton.. " 56 00	
<b>SOLDER—See Metals.</b>		Malleable Iron.....per lb. \$0 10		No. 3, Genuine Wentworth,		No. 740, Bicycle... " 66 00	
<b>SPRINGS, DOOR.</b>		Wrought Steel.....per gro. 4 50		Noiseless Saw...per doz. 20 00		No. 22, Domestic.. " 54 00	
Perfect.		<b>TACKS.</b>		No. 500, All Steel Folding		No. 22, Pioneer... " 103 00	
Nos.....2 3 4 5 6 7		Bill Posters' 6-oz., 25 lb. boxes,		Saw.....per doz. 16 00		No. 770B, Bicycle.. " 115 50	
Per doz.....55c 60c 65c 75c 90c 1 00		per lb.....15c		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
<b>Reliance.</b>		Upholsterers' 6-oz., 25-lb.		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Light Medium Heavy		boxes, per lb.....15c		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		<b>WIRE.</b>		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Terrey's.....per doz. 1 65		O. S. Elwood, No. 1 per doz. Nets		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
<b>SOLDER—See Metals.</b>		O. S. Elwood, No. 2 " "		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
<b>SPRINGS, DOOR.</b>		<b>SWIVELS.</b>		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Perfect.		Malleable Iron.....per lb. \$0 10		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Nos.....2 3 4 5 6 7		Wrought Steel.....per gro. 4 50		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Per doz.....55c 60c 65c 75c 90c 1 00		<b>TACKS.</b>		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
<b>Reliance.</b>		Bill Posters' 6-oz., 25 lb. boxes,		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Light Medium Heavy		per lb.....15c		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Per doz...\$1 55 2 10 3 20		Upholsterers' 6-oz., 25-lb.		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	
Terrey's.....per doz. 1 65		boxes, per lb.....15c		<b>WIRE.</b>		No. 791B, Guarantee " 115 50	

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Mahoning Fdy. Co.,	Youngstown, Ohio
Majestic Co.,	Huntington, Ind.
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Meyer Furnace Co.,	Peoria, Ill.
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Safety Interlocking Stove Pipe Co.,	Mt. Pleasant, Iowa
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Muskegon, Mich.

**Soldering Paste.**

Towner, F. A.,  
Muskegon, Mich.

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Corbin Screw Corporation,  
New Britain, Conn.  
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Lufkin Rule Co., Saginaw, Mich.  
North Bros. Mfg. Co.,  
Philadelphia, Pa.  
Rock Island Mfg. Co.,  
Rock Island, Ill.

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Rock Island Mfg. Co.,  
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Sterling Foundry Co.,  
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Quick Meal Stove Co.,  
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**Stoves—Oil and Gasoline.**

Quick Meal Stove Co.,  
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Maryville, Mo.

**Tools—Carpenters'**

Lufkin Rule Co., Saginaw, Mich.  
North Bros. Mfg. Co.,  
Philadelphia, Pa.

**Tools—Sheet Metal.**

Bertsch & Co.,  
Cambridge City, Ind.  
Dreis & Krump Mfg. Co.,  
Chicago, Ill.  
Maplewood Machinery Co.,  
Chicago, Ill.  
Niagara Machine & Tool Works,  
Buffalo, N. Y.  
Ryerson & Son, Jos. T.,  
Chicago, Ill.  
Whitney Mfg. Co., W. A.,  
Rockford, Ill.

**Tools—Tinsmiths'**

Bertsch & Co.,  
Cambridge City, Ind.  
Double Blast Mfg. Co.,  
North Chicago, Ill.  
Dreis & Krump Mfg. Co.,  
Chicago, Ill.  
Kniedler, Frederick J.,  
Philadelphia, Pa.  
Niagara Machine & Tool Works,  
Buffalo, N. Y.  
Ryerson & Son, Jos. T.,  
Chicago, Ill.

**Torches—Gasolene.**

Clayton & Lambert Mfg. Co.,  
Detroit, Mich.  
Diener Mfg. Co., G. W.,  
Chicago, Ill.  
Double Blast Mfg. Co.,  
North Chicago, Ill.  
Quick Meal Stove Co.,  
St. Louis, Mo.

**Transit Companies.**

Cleveland & Buffalo Transit Co.,  
Cleveland, Ohio

**Ventilators.**

Berger Bros. Co.,  
Philadelphia, Pa.  
Friedley-Voshardt Co.,  
Chicago, Ill.  
Standard Ventilator Co.,  
Lewisburg, Pa.  
Thomas & Armstrong Mfg. Co.,  
London, Ohio

**Ventilators—Ceiling.**

Hart & Cooley Co.,  
New Britain, Conn.  
Henry Furnace & Fdy. Co.,  
Cleveland, Ohio

**Vises.**

North Bros. Mfg. Co.,  
Philadelphia, Pa.  
Rock Island Mfg. Co.,  
Rock Island, Ill.

**Water Outlets**

Ajax Bracket and Outlet Co.,  
Cleveland Heights, Ohio

**Wire.**

American Steel & Wire Co.,  
Chicago, Ill.

**Wood Faces.**

Dover Wood Face & Lbr. Co.,  
Dover, Ohio

**Wrenches.**

Coes Wrench Co.,  
Worcester, Mass.

¶ **ADVERTISING**  
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where only one grew  
before. It multi-  
plies human wants  
and intensifies  
human desires. It  
furnishes excuse to  
timorous and hesi-  
tating ones for pos-  
sessing the things  
which under former  
conditions they  
could easily get  
along without.

¶ **Better begin to  
advertise at once.**  
Every day of waiting  
is a day wasted.

## WANTS AND SALES

For paid yearly subscribers, **AMERICAN ARTISAN AND HARDWARE RECORD** will insert under this head advertisements of not more than fifty words **WITHOUT CHARGE**. Employers wishing to secure employes, parties desiring to purchase or sell business, secure partners, or to exchange, etc., will find that these pages offer excellent opportunities to satisfy their wants. Clerks and tinsmiths looking for situations will find it to their advantage to use these columns. Those who respond to these announcements please mention that they "READ THE ADVERTISEMENT IN AMERICAN ARTISAN AND HARDWARE RECORD."

## BUSINESS CHANCES

For Sale—Three boxes 128 lb. 20x39 furnace coke tin plate 56 sheets, in first class condition. \$17.00 per box. C. A. Hugo and Son, West Point, Nebraska. 7-3t

For Sale—600 shop worn mop sticks at seven cents each in hundred lots, F. O. B. Chicago, or trade for furnace registers. Address Chas. Hahn, 5205 Irving Park Boulevard, Chicago, Illinois. 6-3t

Wanted—Bath Tub and common flat back lavatory. Second hand or enamel chipped off; with bibs and waste. Must be cheap. Address Harman and Zell, 414 Central Avenue, West Duluth, Minnesota. 5-3t

For Sale—Hardware and implement business. Invoices about \$12,000. Annual business about \$30,000. Located in north central Kansas. Good farm and stock country. Address Box 97, Formosa, Kansas. 7-3t

For Sale—Plumbing, heating and sheet metal business. Only one other shop in town of 1,500. If interested will give a practical man all outside work, furnishing all materials and tools whereby you can average \$40.00 or more weekly. Lock Box 424, Plano, Illinois. 7-3t

Business Chance—By enameler, A-1 in all lines of industry, wishes to communicate with one who desires to build or rebuild enameling plant. Address B-10, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 3-7t

For Sale—Stock by firm who has sold out their hardware business; will sell stock all in one or in sections. It will pay anyone who is interested to investigate. Please address B-19, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 6-2t

For Sale—A clean stock of general hardware, that invoices about \$12,000.00. It is located in a small growing town in southwest South Dakota. There's a large territory and good crops. Reason for selling on account of old age. Good opportunity for a good tinner or plumber. Address Box 86, Oelrichs, South Dakota. 6-3t

For Sale—Good clean stock of hardware and fixtures. Business established since 1890. Located in Three Rivers, Michigan. Manufacturing town of six thousand population. New million dollar paper mill under construction, insuring future growth of city. Stock and fixtures will invoice \$4,000. Reason for selling, wish to close estate. Reed Hardware Company, Three Rivers, Michigan. 7-3t

For Sale—Hardware, paint, stoves, tin shop, heating and plumbing business. Successfully operated by present owners for forty years at the same location in a city of 4,000 in a dairy country in Northern Illinois; clean stock \$15,000.00; annual sales \$75,000.00. Modern accounting system and method of handling the business. Fine chance for the right man. Trade not considered. Address B-20, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

## BUSINESS CHANCES

Lightning Rods—Big profits and quick sales to live dealers selling "DIDDLE'S UNIVERSAL RODS." Our copper tests 99.96% pure. Prices are right—get our agency. L. K. Diddle Company, Marshfield, Wisconsin. V78-12-52t

For Sale—On account of age and health I will sell my plumbing and furnace business located in a good town of about 1,300 in eastern Iowa. Good schools and churches. Plenty of work. Address B-24, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 7-3t

For Sale—Plumbing, heating and sheet metal shop, in a county seat town. State normal schools located here. Population about 4,000. About \$3,500 will take it with building. Last year's business was \$10,000. If interested let me hear from you at once. Address B-23, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 7-3t

## HELP WANTED

Wanted—Plumber and fitter. Good wages. W. H. Baker, Sidell, Illinois. 7-3t

Wanted—A number one furnace man. Wages \$1.00 per hour. Address Herman's Tin Shop, Highland Park, Illinois. Phone 555. 6-3t

Wanted—Furnace man to install Holland Furnaces. Highest wages paid. Steady work. Address Holland Furnace Company, Aurora, Illinois. 5-2t

Wanted—Tinners, light and heavy sheet metal work. Steady work in well equipped factory. Dodge Manufacturing Company, Mishawaka, Indiana. 7-3t

Wanted—A good furnace man and tinner at once. Good wages. Address Aberdeen Furnace Company, 611 South Main Street, Aberdeen, South Dakota. 5-3t

Wanted—One experienced cornice, skylight and general sheet metal worker, also one furnace and outside man. Address Ray Wright, Jackson, Mississippi. 5-3t

Wanted—Combination plumber and tinner. Steady work with chance for advancement for the right man. Huron Furnace Company, Huron, South Dakota. 7-3t

Wanted—A good all around tinner and furnace man. Good wages. Steady employment. Address C. E. Walters Company, 248 East Lincoln Highway, De Kalb, Illinois. 5-3t

Wanted—Two tinners to work in modern, well equipped, job shop. Good wages and conditions. Address Shouldice Brothers Sheet Metal Works, Inc., Battle Creek, Michigan. 5-3t

Wanted at Once—Good sheet metal worker. General jobbing and furnace work. \$1.00 per hour—9 hour day. Sterling Sheet Metal and Roofing Company, Sterling, Colorado. 7-3t

Wanted—Two good plumbers or combination men; seventy-five cents an hour; have steady work; good town and schools; county seat three thousand population. Write or wire, C. J. McClure, Lexington, Nebraska. 6-3t

Wanted—A good combination man to do plumbing, heating and furnace work. Prefer man who can estimate jobs. Steady the year around. No lost time. Wages \$45.00 per week. Carl Heinzelman, Midland, Michigan. 7-3t

Wanted—Sheet metal worker, principally on 14 to 20 gauge sheet steel. Steady job and chance for advancement to the right man. State experience, age and wages expected. Address Lock Box A, Painted Post, New York. 7-2t

Wanted—A No. 1 sheet metal worker, pattern cutter and roofer for foreman in ten man shop in Kentucky town, must be hustler and competent to handle men. Address B-17, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

Wanted—Foundrymen, tinners and plumbers to invest small amounts in the Akers National Stove and Specialty Manufacturing Company, soon to build a big new plant in Kansas City. Responsible jobs in the factory are to be given first to stockholders. Address W. T. Tracy, 710 K. C. Life Building, Kansas City, Missouri. 7-2t

## SITUATION WANTED

Situation Wanted—In hardware store. Am capable, reliable and respectable. Steady job only. Geo. A. Hanns, Gothenburg, Nebraska. 7-2t

Situation Wanted—By enameler who is thoroughly acquainted with the enameling business. Kindly address reply to B-11, care AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 3-7t

Situation Wanted—By first class tinner and furnace man. Who has had 25 years' experience. Am married and prefer small place from 1,000 to 5,000 population. For further information address Tinner, 341 Toule Street, Hammond, Indiana. 4-3t

Situation Wanted—By tinner and plumber. Am 37 years old, single and have worked at the trade for the past 22 years. I can make any kind of tinware or sheet metal work. Am also an expert on hot air furnace heating. Do any and all kinds of plumbing and hot water heating and main tapping. Can wipe lead joints. Nothing but a steady job the year around considered. Get \$45.00 per week. State wages in first letter. Lee Balie, Parker, South Dakota. 7-3t

## TINNERS' TOOLS

Wanted—Tinners' scroll shears. Any condition. The Cherry Sign Company, 527 Sherman Avenue, Springfield, Ohio. 7-3t

Wanted—One 30-inch bar folder; one small tuner. Must be in good condition. Hogan and Company, 3168 Archer Avenue, Chicago, Illinois. 7-3t

For Sale—Complete outfit in tinners' tools in good condition. Will make big sacrifice. Newman Hardware and Stove Company, Columbia, Missouri. 7-3t

For Sale—One 30" Triumph exhaust fan, belted, with 6" pulley. Bargain. Will exchange for anything I can use. Joe Lauth, 411 North Mill Street, Pontiac, Illinois. 7-3t

Wanted—To Buy—A set of second hand tinners' tools, including 8 foot brake. Cuddy Plumbing and Heating Company, 634 South Front Street, Mankato, Minnesota. 7-3t

Wanted—A foot power die cutting machine that can be used for notching, punching or skylight dies. Address B-18, care of AMERICAN ARTISAN AND HARDWARE RECORD, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

For Sale—At bargain; entire set of tinners' tools, stakes, machines, folder, rolls, 8 foot steel cornice brake and everything needed to start right in business. Send for detailed list. Four hundred dollars wanted for the tools. Address Derrough and Moore, 508 North Neil Street, Champaign, Illinois. 5-3t

For Sale—Complete set of tinner's tools, including bench machines, squaring shears, cornice brake, stakes and other tools, preferably as a whole to an immediate purchaser at a great sacrifice. For particulars address Charles Miller, Receiver of The Dale and Reed Company, Number 744 Liberty Street, Franklin, Pennsylvania. 5-3t

## BOOKS

Wanted—Warm Air Heater Installers who are anxious to know more about their trade. Ambition is the only requirement outside of knowledge needed to increase your profits. If you will read Snow's Furnace Heating you will gain much knowledge which will be beneficial to you. This book deals with the different types of furnaces, their construction, proper location and setting together with furnace fittings. It is the standard authority. Contents—Furnaces; House Heating, Combination Systems; Air, Heating and Ventilation of School Buildings; Heating of Public Buildings, Churches and Stores; Fan Furnace Combination System; Temperature Control; Estimates and Contracts; Fuels; Miscellaneous Tables and Data; Furnace Fittings; Miscellaneous Notes, from Various Sources, on Furnace Heating. 234 pages. Price, \$2.50. With AMERICAN ARTISAN one year (52 issues), \$3.85. Order your copy today from AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois.